

SEDS II Achiever User Manual

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1 Introduction

1.1 Overview

Thank you for using our SEDS II Achiever digitizing software.

To start using the software, first please refer to the System Requirements [\[9\]](#) section to check if your hardware is compatible for use with the software. Then follow the instructions in the Installation [\[9\]](#) section to install the program.

Please note that SEDS II is divided into 2 levels, **Anchor** and **Achiever**, and make sure that you are installing the correct level that you purchased.

We have work hard to make the contents in this user guide as accurate as possible and they are subject to change without prior notice. The functions in the software prevails over those described in this guide, in case there are any discrepancies, and under no circumstance would the software be treated as incomplete or incorrect.

1.2 System Requirements

- Intel Pentium 266MHz or higher (Compatible processors: AMD K6 or higher, Cyrix 6x86 or higher)
- 128Mb of RAM (256Mb or more strongly recommended)
- 1.44Mb Floppy Drive
- 2x or faster CD-ROM Drive
- Graphics card with 2Mb of memory capable of display 1024x768 with at least 64k colors (VGA with 4Mb of memory capable of display 1280x1024 or higher with at least 16.8 million of color or higher strongly recommended)
- Keyboard and mouse or other pointing device
- One available USB port
- Windows 98/ME/2000/XP
- Color Printer (Optional)

1.3 Installation

1.3.1 Things Required

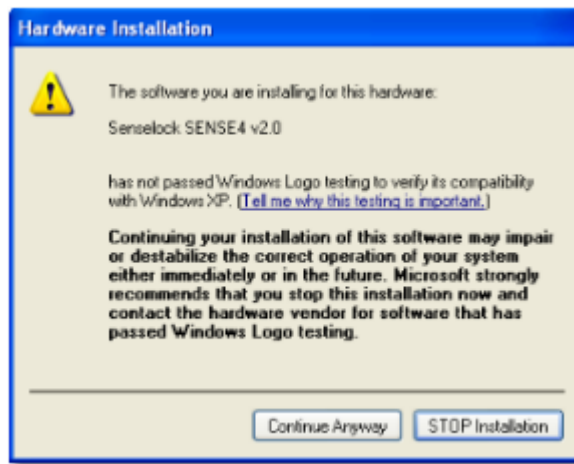
Before installing the program, make sure you have the following items at hand:

- **Security Device:** An USB Dongle to be inserted into one of your USB ports. This device should be labeled with a serial number that starts with 'SU', followed by 4 digits. This number should be quoted when corresponding with the Technical Support Department.
- **Program and Dataset Installation CD ROM.** (CD ROM is optional. Program Files can also be downloaded from our website and stored in a hard drive or other storage device.)
- **Cap File Diskette:** It contains a 'cap' file that is essential in identifying the security device.

1.3.2 Installing the Program

- Close all programs.
- Insert the SEDS II Achiever program installation CD ROM into the CD ROM drive, or click on the setup.exe file in your hard drive.
- When the Installation screen comes up, click on the **Install SEDS II Achiever** button.
- If this is the first time you install the program into this computer, a Driver Installation window will appear. Click **OK** to install the device drivers.
- After installing the drivers, an Install window appears. Click **OK** to restart.
- Your computer should resume the installation process automatically by showing you the Welcome screen. If not, open and close the CD drive door and click on the **Install SEDS II Achiever** button again.

- When the Welcome screen comes up, insert the USB Dongle into one of the USB ports.
- If you are running Windows XP, the window below MAY come up. Click on the **Continue Anyway** button.



- Insert the Cap File Diskette into the floppy drive.
- Follow the prompts to install the SEDS II Achiever program.
- Click on **Finish** to go back to the Installation menu.

1.4 Starting the Program

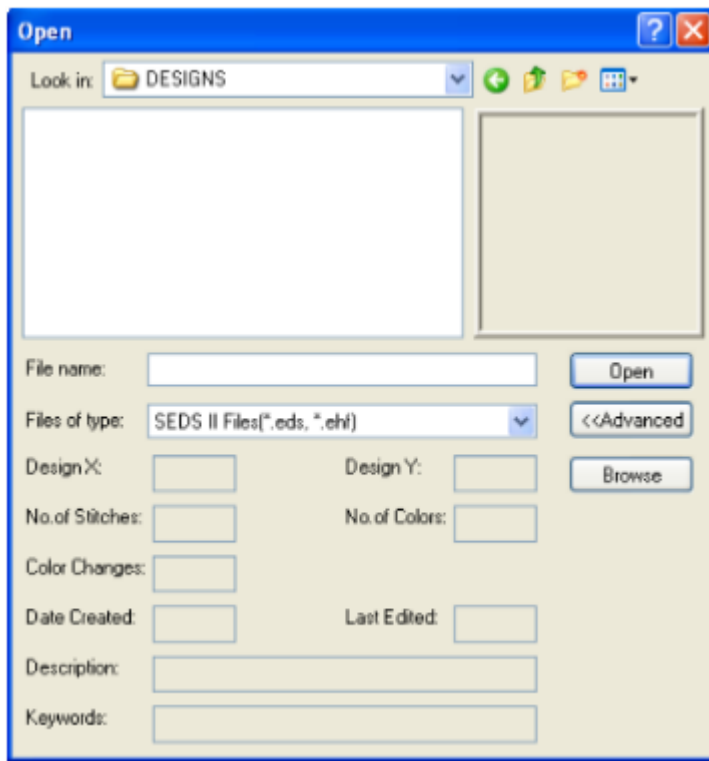
There are several ways to start the program:

1. If the program was installed successfully, there should be an **SEDS II Achiever** program icon  placed on the Desktop. Double click on it to start the program.
2. Click on the "Start" button and then select "Programs" and locate the program group you selected during program setup (default SEDS II). Click on the program group to expand it and then click on **SEDS II Achiever** to start the program.
3. Click on the "Start" button and then select "Run". Type in "install folder\bin\seds.exe" without the quotations, where install folder is the folder you chose during setup.

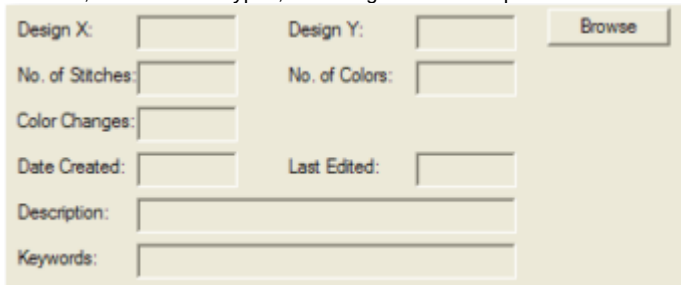
2 Designs Viewing & Manipulation

2.1 Open a Design

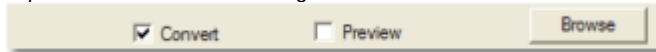
Click on the  icon on the Main Bar ^[113] or select **Open** from the File Menu ^[108] will open the Open Design Dialog Box ^[149] as shown, then follow the steps below to open a design:



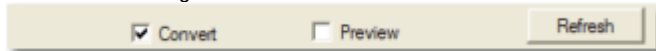
1. Select the folder where the design is located from **Look in**.
2. Select the design file type in **Files of type**. The program currently supports EDS, EDF, EDP, DST, FMC, FDR, ZSK, CND, EXP, TAP, PEC, PES, PCS, PCM, KSM, HUS and SEW formats. Note that if you choose a NON-DOS format, such as FMC, FDR, ZSK, NORMAL EXP and NORMAL CND, the program will access the floppy drive automatically and you need to insert a diskette of the selected format into the drive beforehand. If you forget to insert the diskette or you've selected a wrong type, insert the correct diskette and click the **Refresh** button to display the contents in the diskette (see 3 below).
3. Clicking on the **Advanced** button will toggle the display of advanced features on/off, depending on what design file type you are working on:
 - For EDS, EDF and EDP types, the dialog box will be expanded to include the following:



- **Design X**
Design Width in mm.
 - **Design Y**
Design Height in mm.
 - **Number of Stitches**
Total number of stitches in the design.
 - **Number of Colors**
Total number of colors (needles) of the design.
 - **Color Changes**
Total number of color (needle) changes in the design.
 - **Date Created**
Date the design was created.
 - **Last Edited**
Date the design was last edited.
 - **Description**
Description about the design.
 - **Keywords**
Keywords associated with the design.
 - **Browse**
Invoke the Designs Browser.
Refer to Designs Browser^[12] for more details.
- For other DOS types, such as DST, CND, EXP, TAP, PEC, PES, PCS, PCM, KSM, HUS and SEW, the dialog box will be expanded to include the following:



- **Convert**
If checked, the program will use the internal import filter to convert some of the machine codes to its internal representation. Otherwise no conversion will be performed and machine codes are imported as they are.
 - **Preview**
If checked a thumbnail of the design will be display in the preview window when you click on a file in the file list window. Turning this on will slow down response when navigating between files.
 - **Browse**
Invoke the Designs Browser.
Refer to Designs Browser^[12] for more details.
- For NON-DOS types, such as FMC, FDR, ZSK, NORMAL CND and NORMAL EXP, the dialog box will be expanded to include the following:

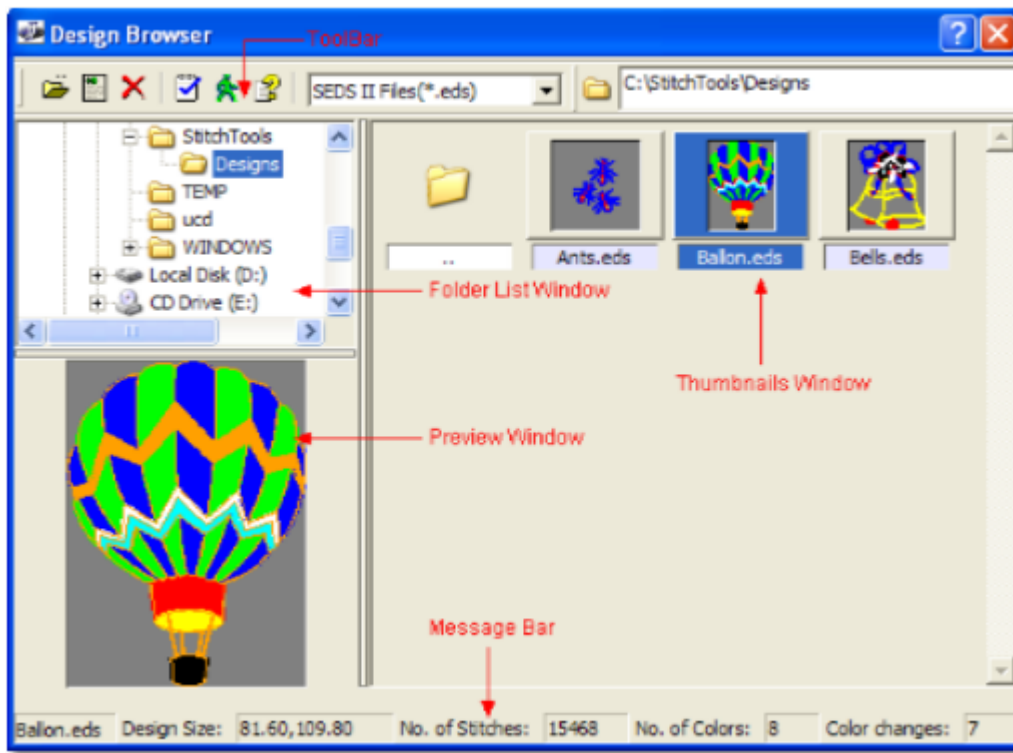


- **Convert**
If checked, the program will use the internal import filter to convert some of the machine codes to its internal representation. Otherwise no conversion will be performed and machine codes are imported as they are.
 - **Preview**
If checked a thumbnail of the design will be display in the preview window when you click on a file in the file list window. Turning this on will slow down response when navigating between files.
 - **Refresh**
Cause the program to read the contents in the NON-DOS diskette again.
4. Select the file from the file list window or if you know the name type it in **File name**.
 5. When you click on a design file in the file list window, a thumbnail of the design will be shown in the preview window if the design is one of the EDS, EDF and EDP type, or if **Preview** is checked.
 6. Click on the **Open** button after you've select the desired design file to open it.

See also Designs Browser^[12] for how to open a design using the Designs Browser.

2.1.1 Design Browser

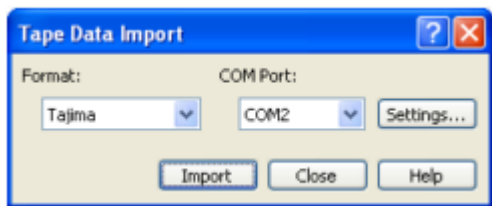
The Design Browser Dialog Box^[17], as shown, will be displayed when you click on **Browse** in the Open Design Dialog Box^[14] (refer to Open a Design^[10] for more details). This gives you thumbnail views of all the designs of a particular type, or of all available types, in a folder.



- To open a design select it from the Thumbnail Window by clicking on the thumbnail and then click the  icon in the Toolbar, or double click on a thumbnail.
- You can follow the step above to open many designs without exiting the dialog box.
- Click on the  icon, however, will open the selected design and close the dialog box afterwards.
- Click on the  icon to check the properties of the design before open.

2.1.2 Import from Tape

The Import from Tape Dialog Box ^[153], as shown, will be displayed when you select **Import From Tape** from the **Import** submenu in the File Menu ^[108]. This allows you to read designs stored on paper tapes through a tape reader.



- The program support serial port tape reader only. Note the number of the serial port (COM1, COM2,...) connecting to the tape reader and check the settings of it in the Program Options ^[177] before proceeding.
- Make sure that the tape reader is connect to the serial port and power on.
- Select the design format (Tajima, Barudan, ZSK or MELCO EXP)
- Select the serial (COM) port number and click on the **Settings** button if you need to change the default settings.
- Click **Import** to start.
- The design will be opened in a Design Window automatically if finished successfully.

2.2 Selection

2.2.1 Select Object(s)

Follow the steps below to select object(s):

1. Click on the  icon on the Primary Bar ^[114].
2. To select a single object, click on the object, with **Additive Select** in the Edit Menu ^[110] unchecked.
3. To select multiple objects:
 - Draw a box in the Design Window, all objects inside the box will be selected.
 - Hold down the Ctrl key on the keyboard and with the mouse button down, draw an arbitrary region in the Design Window. All objects inside the region will be selected.
 - Hold down the Shift key on the keyboard and select objects one by one by clicking on each of them.
 - Check Additive Select from the Edit Menu ^[110] and select objects one by one by clicking on each of them.
4. To select all objects, first uncheck **Display Stitches** from the **Design View** submenu in the View Menu ^[111], then press Ctrl-A on the keyboard or select **Select All** from the Edit Menu ^[110].
5. To select all objects of a certain color, select that color from the Color Bar ^[115] first and then click on the  icon on the Selection Options Bar ^[123].
6. To de-select an already selected object, hold down the Ctrl key and click on it.
7. To de-select all objects:
 - Click on an empty area in the Design Window, with **Additive Select** in the Edit Menu ^[110] unchecked.
 - Select **De-select All** from the Edit Menu ^[110].

2.2.2 Select Stitch Block(s)

Most operations on stitch block(s) require you to select the block(s) first and here we show you how to accomplish this in different ways:

1. Click on the  icon on the Primary Bar ^[114].
2. To select a single stitch block, click on the area inside it, with **Additive Select** in the Edit Menu ^[110] unchecked.
3. To select a stitch block that is covered by other stitch blocks, click on the area inside it continuously until that block is selected.
4. To select multiple stitch blocks:
 - Draw a box in the Design Window, all stitch blocks inside the box will be selected.
 - Hold down the Ctrl key on the keyboard and with the mouse button down, draw an arbitrary region in the Design Window. All stitch blocks inside the region will be selected.
 - Hold down the Shift key on the keyboard and select stitch blocks one by one by clicking on each of them.
 - Check **Additive Select** from the Edit Menu ^[110] and select stitch blocks one by one by clicking on each of them.
5. To select all stitch blocks, press Ctrl-A on the keyboard or select **Select All** from the Edit Menu ^[110].
6. To select all stitch blocks of a certain color, select that color from the Color Bar ^[115] first and then click on the  icon on the Selection Options Bar ^[123].
7. To de-select an already selected stitch block, hold down the Ctrl key and click on it.
8. To de-select all stitch blocks:
 - Click on an empty area in the Design Window, with **Additive Select** in the Edit Menu ^[110] unchecked.
 - Select **De-select All** from the Edit Menu ^[110].

Note that each selected stitch block is highlighted by 4 pink small squares located at the 4 corners of the block.

2.3 Select View Options

2.3.1 Show Stitch Points

You can choose whether to show stitch points in a design by checking/un-checking **Display Stitches with Needle Points** from the Design submenu of the View Menu ^[111]. If checked, a single dot will be drawn at the position of each stitch point in the color specified in Program Options ^[177].

2.3.2 Show Jump Stitches

You can choose whether to show jump stitch lines in a design by checking/un-checking **Display Stitches with Jump Lines** from the Design submenu of the View Menu ^[111]. If checked, jump stitch lines will be drawn as green dotted lines in the design.

2.3.3 Show In/Out Points

You can choose whether to show in/out points of stitch blocks in a design by checking/un-checking **Display Stitch In/Out Points** from the Design submenu of the View Menu ^[111]. If checked, green dots will be drawn at the in points of stitch blocks and red dots at the out points.

2.3.4 Show Machine Codes

You can choose whether to show machine codes in a design by checking/un-checking **Display Stitches with Machine Codes** from the Design submenu of the View Menu ^[111]. If checked, machine codes will be drawn in green rectangles in the design. Note that Hit stitches will not be drawn.

2.3.5 Show Underlay Stitches

You can choose whether to show underlay stitches in a design by checking/un-checking **Display Stitches with Underlay** from the Design submenu of the View Menu ^[111]. The program will uncheck **Display Underlay Stitches Only** automatically when **Display Stitches with Underlay** is checked. See Show Underlay Stitches Only ^[151] for more details.

2.3.6 Show Underlay Stitches Only

You can choose to show underlay stitches only in a design by checking **Display Underlay Stitches Only** from the Design submenu of the View Menu ^[111]. The program will uncheck **Display Stitches with Underlay** automatically when **Display Underlay Stitches Only** is checked. See Show Underlay Stitches ^[151] for more details.

2.3.7 Show Particular Stitch Blocks

You can choose to show particular stitch blocks only in a design according to the following options by checking the corresponding menu item from the Design submenu of the View Menu ^[111]. Note that these options are mutually exclusive, meaning that selecting one will de-select the others.

- **Display All Stitches** - show all stitch blocks
- **Display Manual/Jump Stitches Only** - show Manual/Jump Stitch type only
- **Display Fill Stitches Only** - show Fill Stitch type only
- **Display Satin Stitches Only** - show Satin Stitch type only
- **Display Line Stitches Only** - show Line Stitch type only
- **Display Last 2 Stitch Blocks** - show last 2 stitch blocks only
- **Display Selected Stitches Only** - show selected stitch blocks only
- **Display Selected Stitches With Background** - selected stitch blocks are show as normal and other stitch blocks are 'grayed out' using the **Disable** color defined in the Program Options ^[177].

2.3.8 Show Grid

Grid is an array of horizontal and vertical lines to help you to locate and measure objects and stitch blocks in a design. There are 3 ways to toggle grid display on/off:

- Click **Show Grid** from the View Menu ^[111].
- Press ALT-G on the keyboard.
- Click **Show Grid** in the Program Options ^[177] dialog box.

The distance between the grid lines is user-definable and is independent in the horizontal and vertical directions. See the Program Options^[177] section for how to set the distances and other properties.

2.3.9 Show Ruler

You can choose whether to display horizontal and vertical rulers by checking/un-checking **Show Ruler** from the View Menu^[111]. The rulers will be drawn at the left and top side of the Design Window in the unit specified in Program Options^[177].

2.4 Zoom and Pan

2.4.1 How to Zoom

There are several ways to zoom in/out a design:

1. Select a zoom level directly from the **Zoom Level** pull down box on the Main Bar^[113].
2. Pressing the '+' key on the keyboard to zoom in to the next level or the '-' key to zoom out to the next level.
3. Click on the  icon on the Primary Bar^[114]. This will invoke the zoom function with which you can perform various zoom operations:
 - On the Zoom Options Bar^[123], you can choose to Zoom In, Zoom Out, Zoom to Fit Window, Zoom to Selection and Zoom to Actual Size.
 - In the Design Window, draw a box and the design will be zoomed to a size closely match the size of the box.
4. Draw a box in the Aerial View Window to zoom (refer to Using Aerial View^[16] for more details).

Also there are 2 special zoom functions under the View Menu^[111]:

1. **Zoom to Selection** will zoom the current select objects and stitches to the size of the Design Window.
2. **Last Zoom** will change back to the last zoom level.

2.4.2 How to Pan

There are several ways to pan through a design:

1. If the design is zoomed to be larger than the Design Window, horizontal and/or vertical scroll bars will appear automatically. You can pan through the design using the scroll bars the same way you use them in common Windows programs.
2. Press down the Alt key and one of the arrow keys together to pan in the direction of the arrow key.
3. Click on the  icon on the Zoom Toolbar^[144] in the Primary Bar^[114] to invoke the **Real-time Pan** function. The cursor will be changed to a hand shape and you can click and drag in the Design Window to pan. You can also pan Real-time by pressing down the Space key on the keyboard and at the same time click and drag in the Design Window.
4. Click on a point in the Aerial View Window to pan (refer to Using Aerial View^[16] for more details).

2.4.3 Using Aerial View

There are chances that you get lose where you are at a design after several zoom and pan operations and the Aerial View Window will be useful under such circumstances. Click on the **Aerial View** from the View Menu^[111] or press Ctrl-W on the keyboard to open the Aerial View Window. The whole design is scaled and displayed in the window. A red rectangle is drawn inside the Aerial View Window, which indicates the current viewing area. You can perform zoom and pan function within the Aerial View Window by:

- To pan, click in the Aerial View Window and drag the red rectangle to the area you want to pan to.
- To zoom, click in the Aerial View Window to draw the first point of a box. Release the mouse button and move the cursor to the second point of the box you want to zoom to. A blinking rectangle will be shown as you move the cursor. Click again at the second point of the box and the design will be zoomed to a size closely matched the size of the box you have drawn.

2.5 Slow Redraw

2.5.1 Normal Slow Redraw

To start Normal Slow Redraw, click on the  icon on the Slow Redraw Toolbar^[146] on the Stitch View Control Bar^[143], or select **Slow Redraw** from the View Menu^[111]. The **Play Stitching** button on the Slow Redraw Options Bar^[124], as shown below, will be turned on automatically and the program will start redrawing the current design starting from the beginning. Also the Slow Redraw Options Bar^[124] will be displayed, allowing you to:



- Control the speed of redrawing by adjusting the slider bar towards the right for increasing speeds and left for decreasing speeds.
- Pause redrawing by clicking on **Pause** and resume redrawing by clicking on **Play Stitching**.
- Redraw from the start by clicking on **Replay**.
- Step forward or backward by 1, 10 stitches or 100 stitches increments.
- Move forward or backward by a stitch block.
- Move forward of backward by a needle.
- **Hotkeys**

Forward 1 stitch	Right arrow key
Backward 1 stitch	Left arrow key
Forward 10 stitches	Shift-Right arrow key
Backward 10 stitches	Shift-Left arrow key
Forward 100 stitches	Ctrl-Right arrow key
Backward 100 stitches	Ctrl-Left arrow key
Forward 1 stitch block	Down key
Backwad 1 stitch block	Up key
Forward 1 needle	Shift-Down key
Backward 1 needle	Shift-Up key

2.5.2 3D Simulation Slow Redraw

To start 3D Simulation Slow Redraw, click on the  icon on the Slow Redraw Toolbar^[146] on the Stitch View Control Bar^[143], or select **Simulation Slow Redraw** from the View Menu^[111]. The operations of 3D Simulation Slow Redraw is exactly the same as Normal Slow Redraw^[17]. The difference between the two is that when using this redraw function the program will redraw stitch lines in a 3D simulation way, giving you a better visual effect of how the design will be like after sewed out.

2.6 Align and Distribute

You can align stitch blocks to Top, Bottom, Left, Right, Vertical Center or Horizontal Center as follows:

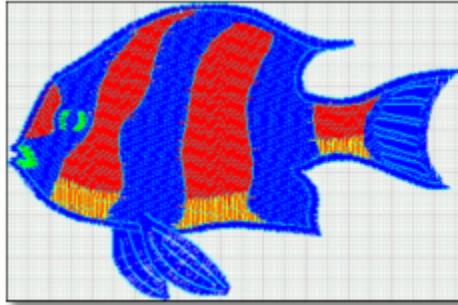
1. Select the stitch block(s) that you want to align (refer to Select Stitch Block(s)^[14] for more details).
2. Select the corresponding **Align** function from the Align & Distribute submenu under the Edit Menu^[116].

Similarly, you can distribute stitch blocks to space evenly in the horizontal or vertical direction as follows:

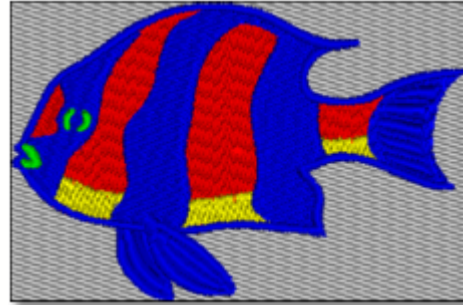
1. Select the stitch block(s) that you want to align (refer to Select Stitch Block(s)^[14] for more details).
2. Select the corresponding **Distribute** function from the Align & Distribute submenu under the Edit Menu^[116].

2.7 3D Simulation View

To turn on/off 3D Simulation View mode, click on the  icon on the Stitch View Control Bar^[143], or select **Simulation Display** from the View Menu^[111]. If on, stitches on the current design will be displayed in a 3D simulation way, giving you a better visual effect of how the design will be like after sewed out. Below is an example to show the effect will 3D simulation on and off:



3D simulation off



3D simulation on

See Choose Simulation Background^[18] for more details for how to change the background for simulation view. (The example above use **Default Pattern** as background)

2.7.1 Choose Simulation Background

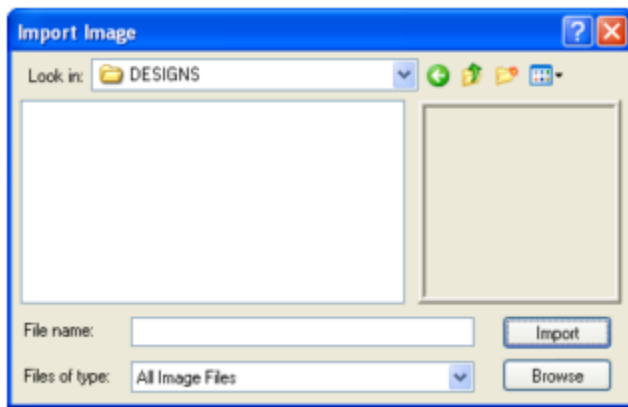
You can choose the display the background for simulation view in 3 different ways by selecting the corresponding menu item from the Simulation Background submenu of the View Menu^[111]:

- **Single Color** - Background is displayed as single solid color using the color defined in **Background** in the Program Options^[177].
- **Default Pattern** - Background is displayed using the default fabric-like pattern generated automatically by the program.
- **Background Image** - Background is displayed using the user-defined image, which will be tiled in the Design Window if its size is smaller than the Design Window. See Import Simulation Background Image^[18] for more details.

2.7.2 Import Simulation Background Image

To open or change the background image, follow the steps below:

1. Select **Import Simulation Background Image** from the Import submenu of the File Menu^[108]. The Import Simulation Background Image Dialog Box^[152], as shown below, will be opened.



2. Select the folder where the image is located from **Look in**.
3. Select the image type, or use **All Image Files**. The program currently supports BMP, JPEG, TIFF, PCX, GIF, MSP, RAS, PCT,

WMF, PSD and AWD formats.

4. Click **Import** to import the image. Note that importing a new image will replace the original one if exists.
5. Click **Browse** will invoke the Image Browser ^[32], allowing you to select a background image there.

2.8 Stitch Blocks Navigation

After selecting a certain stitch block, you can jump to the previous or the next stitch block easily by:

- Click on the  icon on the Stitch View Control Bar ^[143] to jump to the previous block or the  to jump to the next block.
- Press the Page Up key on the keyboard to jump to the previous block or the Page Down key to jump to the next block.

2.9 Change Color

Follow the steps below to change the color of stitch block(s):

1. Select the stitch block(s) that you want to change color (refer to Select Stitch Block(s) ^[14] for more details). You can select stitch blocks with different colors and change them all to the same color.
2. Select the destination color from the Color Bar ^[115].
3. Right-click in the Design Window and select **Change Color** in the context menu.

Note that the sequence of the stitch blocks may be altered if you change the colors.

2.10 Measurement

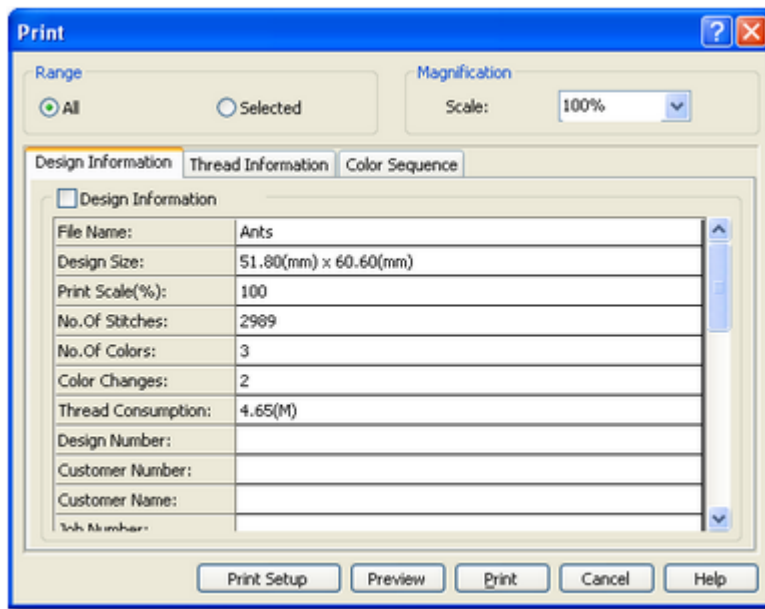
You can use the measurement tool to measure lengths and angles in the Design Window. To use:

1. Click on the  icon on the Primary Bar ^[114].
2. Click on a point in the Design Window. This is the anchor point.
3. With the mouse button released move the cursor around in the Design Window and a blue dotted line will be drawn from the anchor point to wherever the cursor is moved.
4. The length between the current cursor position and the anchor point will be shown on the Status Bar ^[148]. The angle between the dotted line and the horizontal axis will be shown also in anti-clockwise direction.

2.11 Printout

Follow the steps below to print out a design:

1. Open the design file (refer to Open a Design ^[10] for more details on how to open a design).
2. Click on the  icon on the Main Bar ^[113], or select **Print** from the File Menu ^[108], or press CTRL-P on the keyboard.
3. The Print Dialog Box ^[158] will be displayed as shown below:



4. Click **Print Setup** to change printer related properties, like which printer, printing direction etc.
5. Select **All** to print the whole design or **Selected** to print just the selected stitch blocks, in which case you need to select stitch blocks first before printing.
6. Select a magnification scale from the **Scale** list.
7. Mark the check box for each information tab to be printed.
8. Select **Preview** to display a preview of the final output.
9. Select **Print** to start printing.

2.12 Using Stitch Browser

You can use the Stitch Browser to perform functions like selection, navigation, editing of stitch blocks. See [Stitch Browser](#) ^[99] for more details.

3 Designs Output and Conversion

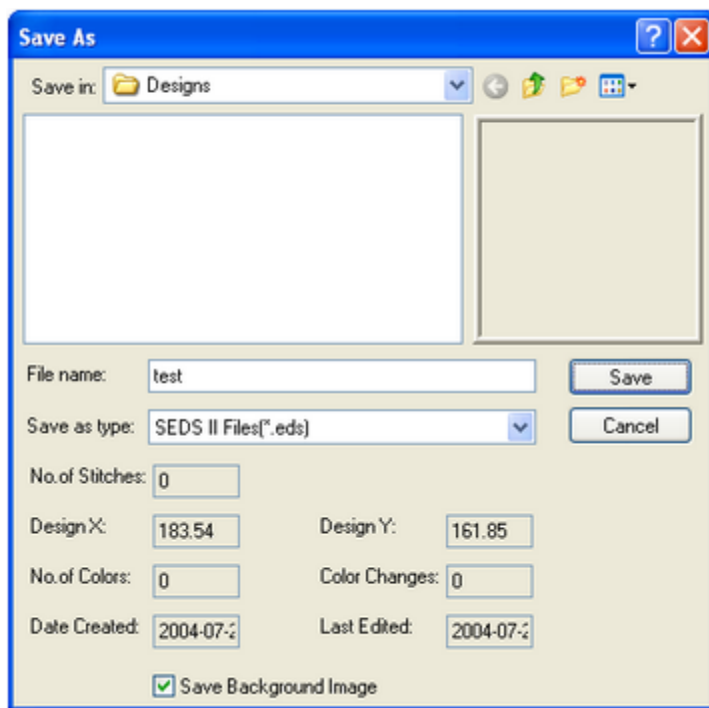
3.1 Using Save As

The Save As function can be used to:

- Save the current design file to a new name.
- Save the current design file to another folder.
- Convert the current design file to another DOS format design file, such as EDS, EDF, EDP, DST, CND, EXP, TAP, PEC, PES, PCS, PCM, KSM, HUS and SEW.

To use, follow the steps below:

1. Select **Save As** from the File Menu ^[108].
2. The Save As Dialog Box ^[150] will be displayed, as shown below:



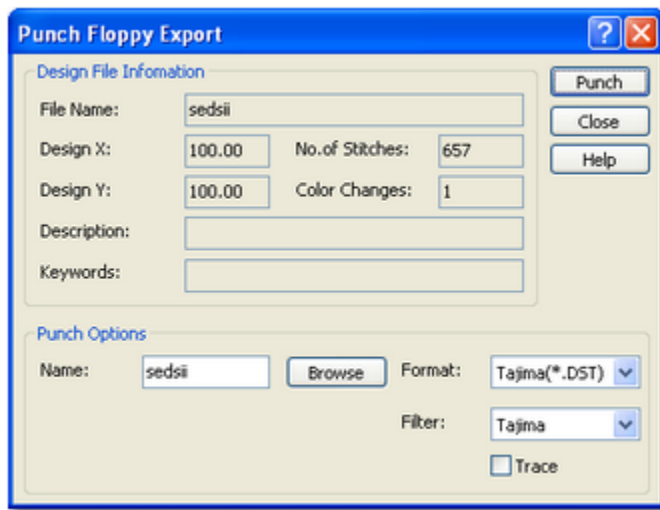
3. Select the folder you want to save the design to from **Save in**.
4. The original name of the design file will be shown in **File name**. Change it to a new name if desired.
5. Select the format you want to save the design to from **Save as type**.
6. If the design file includes a background image (applicable to EDS, EDF and EDP files only), check **Save background image** if you want to save the background image also. Note that the image will be embedded in the design file and thus increase its size.
7. Click **Save** to finish. Note that if there is a design file with the same name as you entered, a warning dialog box will be displayed asking you if you want to overwrite the file. Click **Yes** to overwrite or **No** to go back and enter a new file name.

3.2 Using Punch Floppy Export

The Punch Floppy Export function is primarily used to save design files directly to a floppy diskette, which is the only option for NON-DOS formats, such as FMC, FDR, ZSK, NORMAL CND, NORMAL EXP. These NON-DOS floppy diskettes needed to be specially formatted before used (refer to Floppy Disk Format ²³¹ for more details).

To use, follow the steps below:

1. Insert a formatted floppy diskette in the floppy drive.
2. Select **Punch Floppy Export** from the Export submenu of the File Menu ¹⁰⁸.
3. The Punch Floppy Export Dialog Box ¹⁵⁵ will be displayed, as shown below:



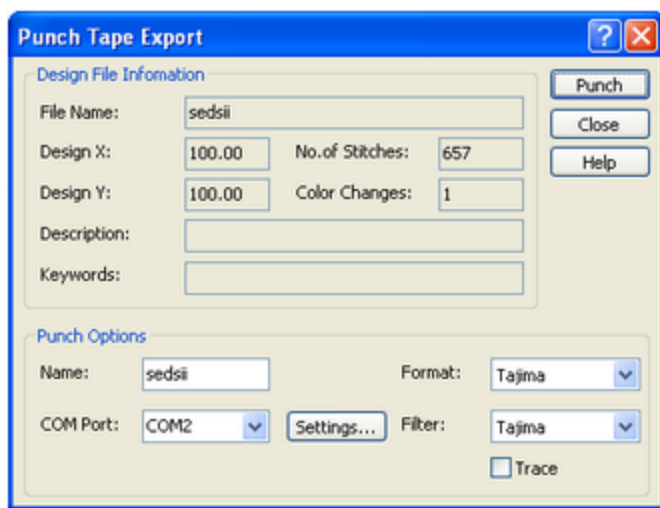
4. The original design file name will be shown in **Name** and you can change it to another name. Click **Browse** to check the list of files already in the floppy diskette.
5. Select the destination output format from the **Format** list. Note that the default filter will be selected automatically in **Filter** when you select a format. You can select your own defined filter is desired (See Machine Code Filter^[24] for how to create your own filters).
6. Check **Trace** if you want to add a series of jump stitches to the beginning of the output, which run along the border of the design. This may help you to check if the design is out of bound.
7. Click **Punch** to start.

3.3 Using Punch Tape Export

The Punch Tape Export function is primarily used to output design files to paper tapes using a tape puncher, in Tajima, Barudan, ZSK or MELCO EXP format.

To use, follow the steps below:

1. Connect the tape puncher to one of the available serial(COM) ports and power on.
2. Select **Punch Tape Export** from the Export submenu of the File Menu^[108].
3. The Punch Tape Export Dialog Box^[156] will be displayed, as shown below:



4. The original design file name will be shown in **Name** and you can change it to another name.

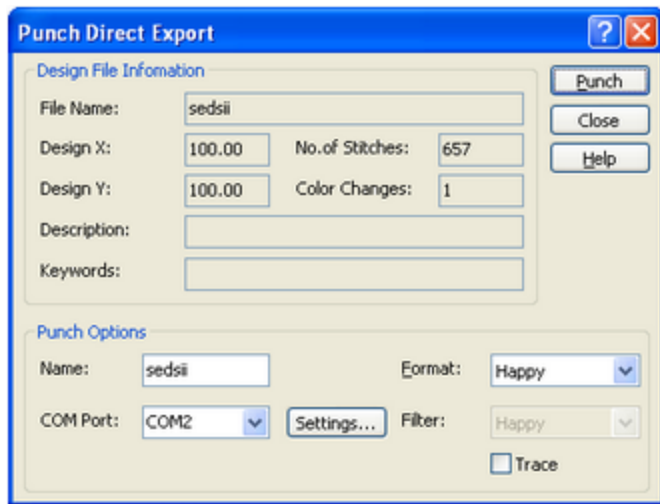
5. Select the destination output format from the **Format** list. Note that the default filter will be selected automatically in **Filter** when you select a format. You can select your own defined filter is desired (See Machine Code Filter^[24] for how to create your own filters).
6. Check **Trace** if you want to add a series of jump stitches to the beginning of the output, which run along the border of the design. This may help you to check if the design is out of bound.
7. Select the serial(COM) port which is connected to the tape puncher in **COM Port** and click **Settings** to change the settings of the serial(COM) port if necessary.
8. Click **Punch** to start.

3.4 Using Punch Direct Export

The Punch Direct Export function is primarily used to output design files directly to embroidery machines.

To use, follow the steps below:

1. Connect the embroidery machine to one of the available serial(COM) ports and power on.
2. Select **Punch Direct Export** from the Export submenu of the File Menu^[108].
3. The Punch Direct Export Dialog Box^[157] will be displayed, as shown below:



4. The original design file name will be shown in **Name** and you can change it to another name.
5. Select the destination output format from the **Format** list. Note that the default filter will be selected automatically in **Filter** when you select a format. You can select your own defined filter is desired (See Machine Code Filter^[24] for how to create your own filters).
6. Check **Trace** if you want to add a series of jump stitches to the beginning of the output, which run along the border of the design. This may help you to check if the design is out of bound.
7. Select the serial(COM) port which is connected to the embroidery machine in **COM Port** and click **Settings** to change the settings of the serial(COM) port if necessary.
8. Click **Punch** to start.

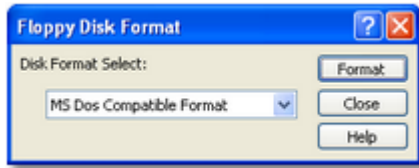
3.5 Floppy Disk Format

The Floppy Disk Format function is used to format floppy diskette, especially for NON-DOS formats, such as FMC, FDR, ZSK, NORMAL CND and NORMAL EXP.

To use, follow the steps below:

1. Insert a blank floppy diskette into the floppy drive. For NON-DOS formats, you need a DD diskette. IF YOU USE A NON-BLANK DISKETTE, ALL CONTENTS WILL BE ERASED.

2. Select **Floppy Disk Format** from the File Menu^[108].
3. The Floppy Disk Format Dialog Box^[157] will be displayed, as shown below:



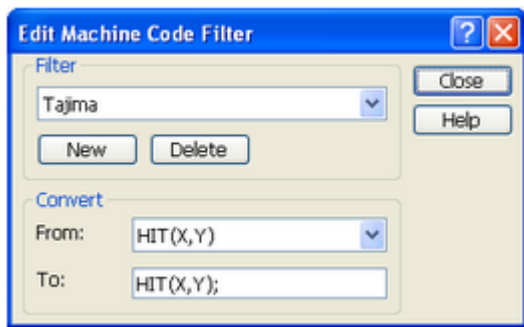
4. Select a format from the **Disk Format Select** list. Note that DST, CND, EXP, TAP, PEC, PES, PCS, PCM, KSM, HUS and SEW are DOS compatible and you can use the Windows Explorer to perform formatting for them.
5. Click **Format** to start formatting.

3.6 Machine Code Filter

Not every machine is built the same, and, likewise, not every user's requirements are the same. Have you ever wished you could add three hit stitches right before you do a color change? The Edit Machine Code Filter in SEDS II Achiever does this kind of thing well. Users are allowed to edit each of the machine code functions individually and save as their own machine code filter, and use them to output designs. This makes possible extra features that the machine does not support originally.

To use, follow the steps below:

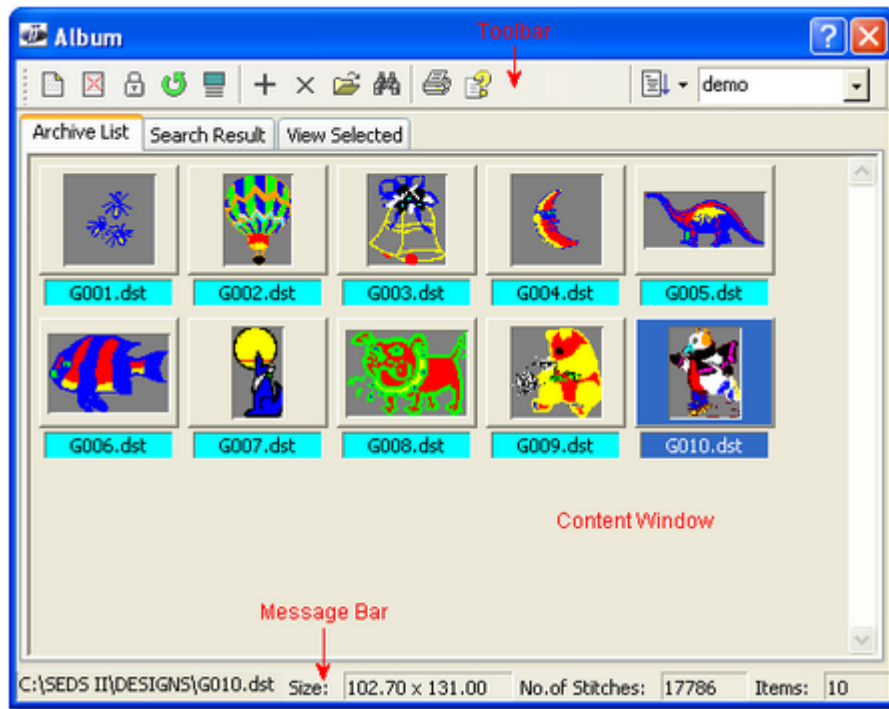
1. Select **Edit Machine Code Filter** from the Tools Menu^[113].
2. The Edit Machine Code Filter Dialog Box^[174] will be displayed, as shown below:



3. Select an existing filter from the **Filter** list, or click **New** to create a new filter.
4. Select a machine code from the **From** list that you want to change.
5. Input the sequence of codes, separated by ";", in **To**. The values enclosed in the bracket are horizontal displacement and vertical displacement in units of 0.1mm. Use (0, 0) for no displacement codes and (X, Y) for codes with original displacement. Available codes are:
 - HIT - needle down
 - JUMP - needle up
 - TRIM - trim
 - STOP - stop
 - NEEDLE_CHG - needle change
 - NEEDLE_xx - needle number xx
 - SLOW - slow speed
 - FAST - fast speed
 - FRAME_IN - move frame in
 - FRAME_OUT - move frame out
 - SEQ_ON - cutter needle
 - TAPE_END - end of file
 - NEEDLE_UP - needle up

4 Designs Management using Album

The Album function is used for designs management. You can categorize designs by grouping them in an album and performs advance searching and sorting functions within the album. To use, select **Album** from the File Menu^[108] and the Album Dialog Box^[174] will be opened, as shown below:



- Manage an Album^[25]
- View Designs in Album^[26]
- Manage Designs Using Album^[27]

4.1 Manage an Album

- Create a New Album^[25]
- Delete an Album^[26]
- Select an Album^[26]
- Lock/Unlock an Album^[26]

4.1.1 Create a New Album

Follow the steps below to create a new album:

1. Type a name for the new album in the **Album List** box.
2. Click on the  icon on the toolbar.
3. An empty album will be created.

4.1.2 Delete an Album

Follow the steps below to delete an album:

1. Select the album you want to delete (refer to Select an Album ²⁶ for more details).
2. Click on the  icon on the toolbar.
3. A delete confirmation dialog box will be displayed and click **Yes** to delete and **No** to cancel.

4.1.3 Select an Album

You need to select an album first before you can view its contents or manipulate it. This is done by selecting from the **Album List** box. (Click on the button with a down arrow to open the list of albums and click on one to select.)

4.1.4 Lock/Unlock an Album

Click on the  icon to lock an album and the  icon to unlock it. These two icons will be shown alternatively depending on whether an album is locked or not. When locked you cannot add items to or remove items from the album.

4.2 View Designs in Album

- View all Designs ²⁶
- View Search Result ²⁶
- View the Selected Design ²⁶
- View Design Information ²⁷

4.2.1 View all Designs

To view all designs in the current album, click on **Archive List**. There all designs are shown as thumbnails and you can perform the following operations:

- Click on a thumbnail will select the design and the frame of the thumbnail will change to blue color when selected.
- Double click on a thumbnail will open the design to a Design Window.
- Right-click anywhere in Content Window and select **Sort Items** from the context menu will display a submenu for sort options:
 - By Name - Sort by name in ascending order.
 - By Size - Sort by height and then by width in ascending order.
 - By Stitches - Sort by the total number of stitches in ascending order.
 - By Last Edit Time - Sort by the last edited date in ascending order.

4.2.2 View Search Result

To view the result from the Search function (refer to Search Designs in Album ²⁸ for more details), click on **Search Result**. Only thumbnails of the designs that match the search criteria will be shown. You can perform similar operations as in **Archive List** (refer to View all Designs ²⁶ for more details).

4.2.3 View the Selected Design

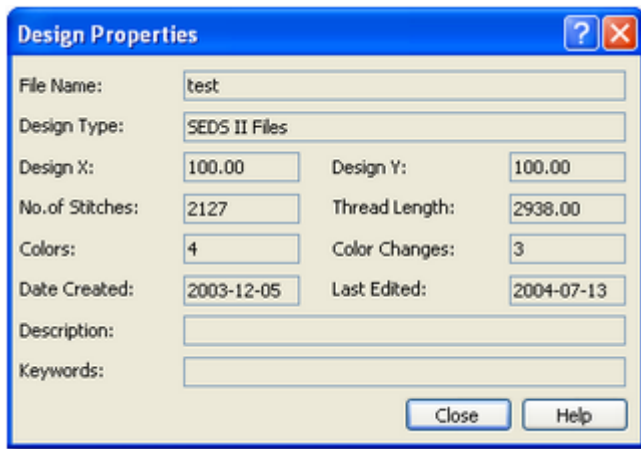
To view a design in a large view, select a design in **Archive List** or in **Search Result** and then click on **View Selected**. Right-click anywhere in Content Window will open a context menu with the following functions:

- Zoom In
- Zoom Out
- Zoom 1:X - Zoom to pre-defined scale
- Zoom to Window
- Hide/Show Ruler - Turn On/Off the display of the ruler

4.2.4 View Design Information

You can obtain useful information, such as size, total number of stitches, total number of color changes etc, of designs in an album in the following ways:

- Information of the selected design shown on the Message Bar (refer to Designs Management using Album ²⁵ for more details).
- By default, thumbnails are shown in Compact View mode, in which just the file name of the designs are displayed. However you can switch to Normal View mode by clicking on the  icon on the Toolbar. In this mode, the size in mm, total number stitches and number of color changes will be displayed as well under each thumbnail. Note that the Normal View icon  and the Compact View icon  will be shown alternatively depending on the current view mode.
- Right-click on a thumbnail and select **Properties** from the context menu will open the design properties dialog box as shown below:



Note that the **Thread Length** property will be shown only for EDS files.

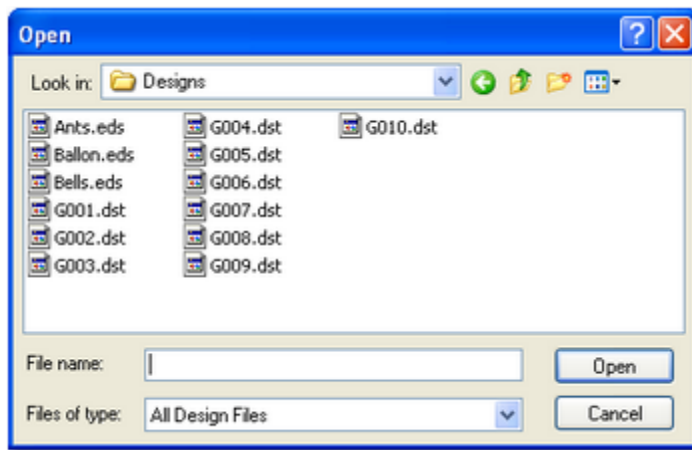
4.3 Manage Designs Using Album

- Add a Design to Album ²⁷
- Open a Design from Album ²⁸
- Delete a Design from Album ²⁸
- Search Designs in Album ²⁸
- Print Designs in Album ²⁹

4.3.1 Add a Design to Album

Follow the steps below to add design files to an album:

1. Select an album into which you want to add designs (refer to Select an Album ²⁶ for more details).
2. Click the  icon on the toolbar to unlock the album if it is locked.
3. Select **Archive List**.
4. Click on the  icon on the toolbar, or right-click in the Content Window and select **Add Items** from the context menu. The dialog box below will be shown:



- 5 Select the folder where the designs are located in **Look in**.
- 6 Select multiple files from the file list window or type in the name of a design in **File name**.
- 7 Click **Open** to add the files to the album.

Note that when you add designs to an album, only the paths and thumbnails are saved in the album but not the designs themselves.

4.3.2 Open a Design from Album

The Album Window is designed to be able to co-function with the main program, meaning that you can continue to work in the main program window with the Album Window opened. The ability to open a design file directly from an album makes it very easy for you to manipulate your designs. Follow the steps below to open a design from an album:

1. Select the album which contains the designs you want to open (refer to Select an Album ²⁶ for more details).
2. Choose to open designs from **Archive List** or **Search Result**.
3. Select the thumbnail of the design you want to open and click on the  icon on the toolbar, or right-click on the thumbnail and select **Open** from the context menu, or double-click on the thumbnail.
4. The design will be opened in a new Design Window.

Note that sometimes the  icon will be disabled. This happens when the design file no longer exists in the path saved in the album.

4.3.3 Delete a Design from Album

Follow the steps below to delete design files from an album:

1. Select an album from which you want to delete designs (refer to Select an Album ²⁶ for more details).
2. Click the  icon on the toolbar to unlock the album if it is locked.
3. Choose to delete designs from **Archive List** or **Search Result**.
4. Select the thumbnail of the design you want to delete and click on the  icon on the toolbar, or right-click on the thumbnail and select **Delete** from the context menu.
5. A deletion confirmation dialog box will be shown and click **Yes** to delete and **No** to cancel.

4.3.4 Search Designs in Album

The search function is very useful if you have a lot of designs in an album and need to display some of them with particular properties. To use, click on the  icon on the toolbar and the Search dialog box will be displayed as shown below:

A number of search criteria are available and check the box on the left of it to enable it. Search will be performed for designs that match all the enabled criteria.

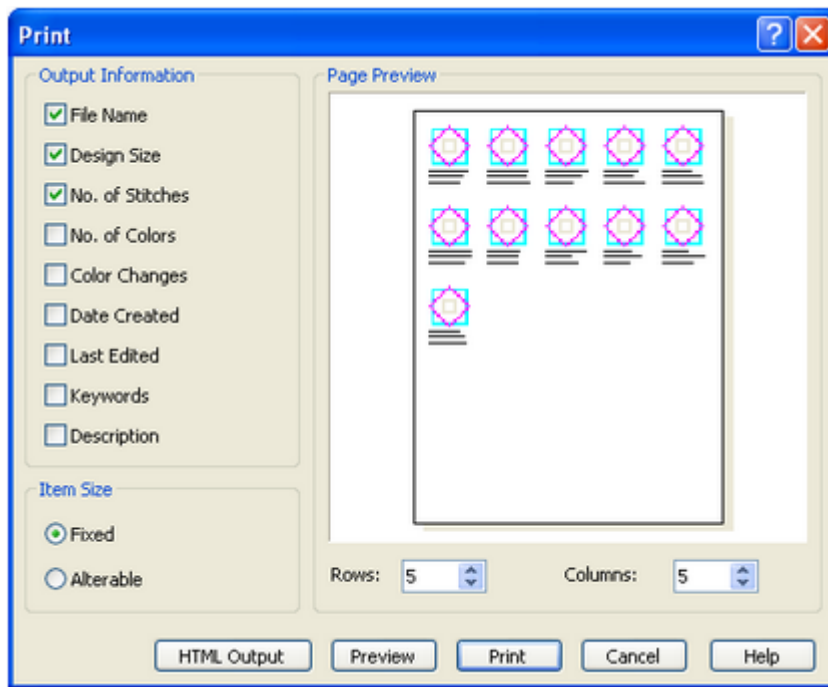
- **File Name** - Name of the designs. You can use wildcard characters here, e.g. a*. * means all designs with names start with 'a'.
- **File Type** - Design file format, including EDS, EDF, EDP, DST, CND, EXP, TAP, PEC, PES, HUS, SEW, PCS, PCM, KSM.
- **No. of Stitches** - Total number of stitches of the design.
- **Design X** - Width of design in mm.
- **Design Y** - Height of design in mm.
- **No. of Colors** - Total number of colors in the design.
- **Color Changes** - Total number of color changes (needles) in the design.
- **Date Created** - The date the design was created (applicable to EDS, EDF, EDP files only).
- **Last Edited** - The date the design was last edited (applicable to EDS, EDF, EDP files only).

Note that the **Design Info** and **Product Info** tabs are for advanced search options for EDS files ONLY.

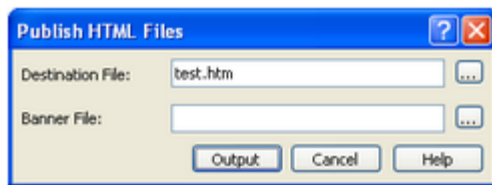
4.3.5 Print Designs in Album

You can print thumbnail of designs in an album using the Print function. To use, follow the steps below:

1. Select the album with the designs you want to print (refer to Select an Album  for more details).
2. Choose to print designs from **Archive List** or **Search Result**.
3. Click on the  icon on the toolbar. The Print dialog box will be displayed as shown below:



4. Select the design information you would like to print under each thumbnail in **Output Information** by checking the appropriate boxes.
5. Select the number of rows and columns you want the thumbnails printed on a page in **Rows** and **Columns**.
6. Select **Fixed** to print thumbnails in a size pre-defined by the program according to **Rows** and **Columns**. Select **Alterable** to print thumbnails at a size that fit the page as much as possible. You can notice the effect of **Fixed** and **Alterable** in the **Page Preview** window in real time.
7. Click **Preview** to check if you are satisfy with the layout if necessary.
8. Click **Print** to start printing.
9. You can select to print the thumbnails to a html file. Click **HTML Output** and the dialog box below will be shown:



Input the name of the html file you want to create in **Destination File** and select an image for the **Banner File**, if any. The banner image will be shown at the top of the html file. Click **Output** to create the file.

5 Designs Creation

SEDS II Achiever is an object-base digitizing program, meaning that all stitch blocks, except manual stitch types blocks, rely on one or more objects. An object is a geometric shape created by the user to define an area or a path in/along which a stitch block is to be created. You can create any desired shape objects from scratch, or trace from virtually any type of artwork imported into the program.

Each stitch type has its own specific requirement on objects. For example, Normal Fill Stitch type requires one or more closed objects (objects that do not have open ends). Objects and their properties can be shared by more than one stitch block. When the shape or size of an object changed, all the stitch blocks attached to it change too. This is what we call object inheritance.

The objects creation process and the stitches creation process are completely separated, so that you can create all or part of the objects first and then create stitches on them.

5.1 About Images

Background images are used to trace objects as well as used in OneTouch auto-digitizing and Photo Stitches. You can choose to turn on/off the background image by checking/un-checking **Displaying Background Image** from the Design View submenu of the View Menu [111].

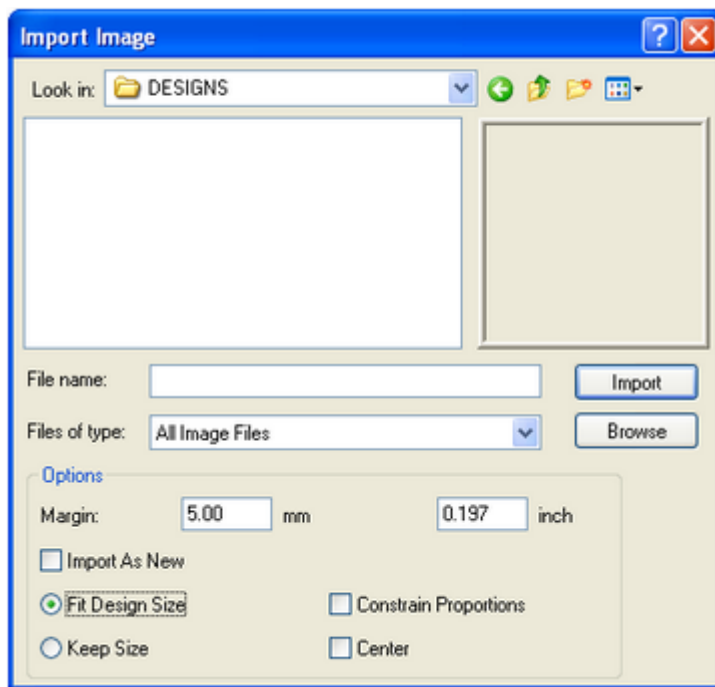
Refer to the following for more details on how to work with images:

- Import an Image [31]
- Acquire Image [32]
- Export Image [33]
- Reduce Image Color [33]
- Mirror and Rotate [34]
- Image Editing [34]

5.1.1 Import an Image

To import an image in the current Design Window, follow the steps below:

1. Select **Import Image** from Import submenu of the File Menu [108]. The Import Image Dialog Box [151] will be opened, as shown below:



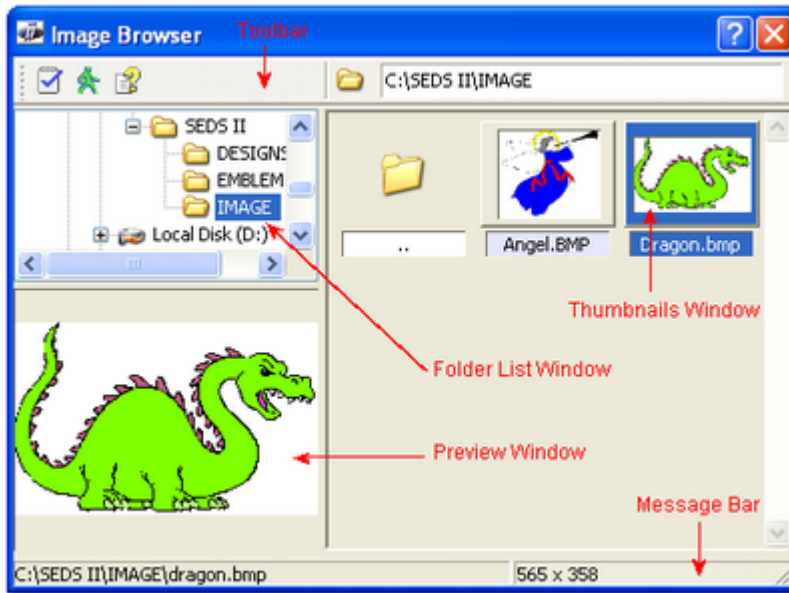
2. Select the folder where the image is located from **Look in**.
3. Select the image type, or use **All Image Files**. The program currently supports BMP, JPEG, TIFF, PCX, GIF, MSP, RAS, PCT, WMF, PSD and AWD formats.
4. Select the file from the file list window or if you know the name type it in **File name**.
5. Enter a value, in mm or inch, in **Margin** to add margins around the image when import.
6. Check **Import As New** if you want to import the image to a new Design Window. The new Design Window thus created will be of same size as the image plus margins.
7. If **Import As New** is not checked, choose between **Fit Design size** and **Keep Size**. **Fit Design Size** will scale the image to fit the size of the Design Window minus margins. **Keep Size** will import the image at its original size. It will be truncated if bigger than the size of the Design Window minus margins.
8. Check **Constrain Proportions** to keep the original aspect ratio if scaling is required. (Enabled only when **Fit Design Size** is selected.)
9. Check **Center** to put the image at the center of the Design Window. (Enabled only when **Keep Size** is selected.)

10. Click **Import** to import the image.

You can also click **Browse** to invoke the Image Browser^[32] to import an image from there.

5.1.1.1 Image Browser

The Image Browser Dialog Box^[172], as shown below, will be displayed when you click on **Browse** in the Import Image Dialog Box^[151]. This gives you thumbnail views of all images in a folder.

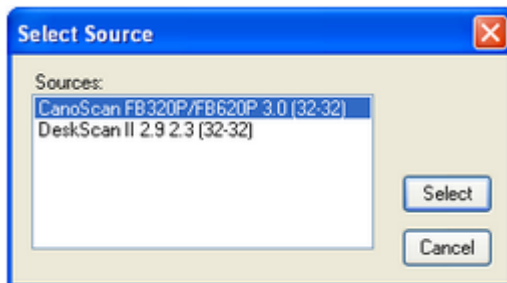


- Select a folder from the **Folder List Window**.
- To open an image, select it from the Thumbnail Window by clicking on the thumbnail and then click the  icon in the Toolbar, or double click on the thumbnail.

5.1.2 Acquire Image

You can import an image from a TWAIN device, like a scanner, directly into the current Design Window. To use, follow the steps below:

1. Select **Select Source** from the File Menu^[108], the Select Source Dialog Box will be displayed, as shown below:



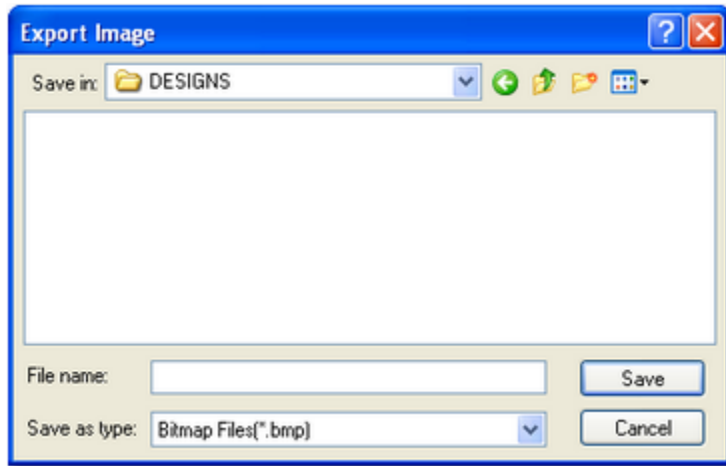
You can skip this and the next step if you are using the last used device.

2. Select a device from the **Sources** list and click **Select**.
3. Select **Acquire Image** from the File Menu^[108], a device specific dialog box will be opened and follow the steps in your device's user manual to acquire the image.
4. The image will be placed in the current Design Window when finished.

5.1.3 Export Image

You can choose to save the background image only (e.g. after acquiring the image from a scanner) for later use. To Use:

1. Select **Export Image** from the Export submenu of the File Menu ^[108].
2. The Export Image Dialog Box ^[153] will be displayed, as shown below:



3. Select the folder you want to save the image to from **Save in**.
4. Input a file name in **File name**.
5. Currently, only BMP format is supported.
6. Click **Save** to save.

5.1.4 Adjust Brightness

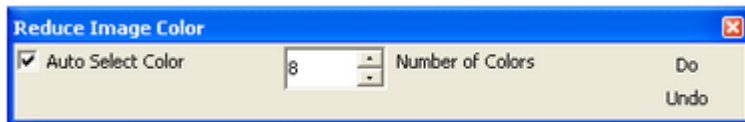
You can adjust the brightness of the background image as follows:

- To lighten the background image, click the  icon on the Stitch View Control Bar ^[143], or press F11 on the keyboard.
- To darken the background image, click the  icon on the Stitch View Control Bar ^[143], or press F12 on the keyboard.

5.1.5 Reduce Image Color

Sometimes it is necessary to reduce the number of colors in an image in order to use some features, like OneTouch auto-digitizing, or to obtain better results in certain features.

The function can be started by clicking on the  icon in the OneTouch Toolbar ^[146], or by selecting **Reduce Image Color** from the Edit Menu ^[116]. The Reduce Image Color Bar ^[147] will be displayed on top of the program window, as shown:



This function works by first selecting a number of reference colors, either:

- (i) automatically by the program as below:
 1. Check **Auto Select Color**.
 2. Input the **Number of Colors** you want to reduce to.

Or

(ii) manually as below:

1. Uncheck **Auto Select Color**.
2. Click on any area that contains a color you wish to be a reference color. Notice that the color you selected will be added in the Reduce Image Color Bar^[147] and the **Number of Colors** will be increased by one each time a color is added.
3. If you make a mistake or for some reasons you want to remove a selected color, just click on the color on the Reduce Image Color Bar^[147].

Usually the automatic method will have the job done satisfactorily but in some cases if the result is not undesirable you may try the manual method.

Note that if you are preparing the image for OneTouch auto-digitizing, **Number of Colors** MUST be below 14.

After the reference colors are selected, click **Do** to start processing.

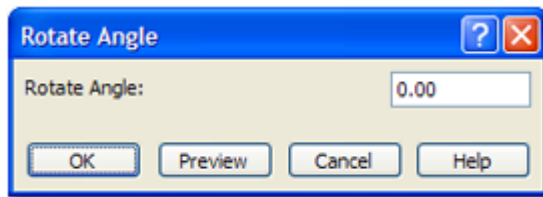
When finished, examine the quality of the image and if you think it is not good enough click **Undo** on the Reduce Image Color Bar^[147] to undo the changes. You may try to change the value in **Number of Colors** or use the manual method describe above to obtain a better result.

5.1.6 Image Mirror and Rotate

The image mirror and rotate functions are located on the Edit Menu^[110]:

- **Image X-Mirror**
Mirror the background image of the active Design Window in the horizontal direction.
- **Image Y-Mirror**
Mirror the background image of the active Design Window in the vertical direction.
- **Image Rotate**
Rotate the image of the active Design Window by a arbitrary angle.

When select, the Rotate Image dialog box will be show as below:

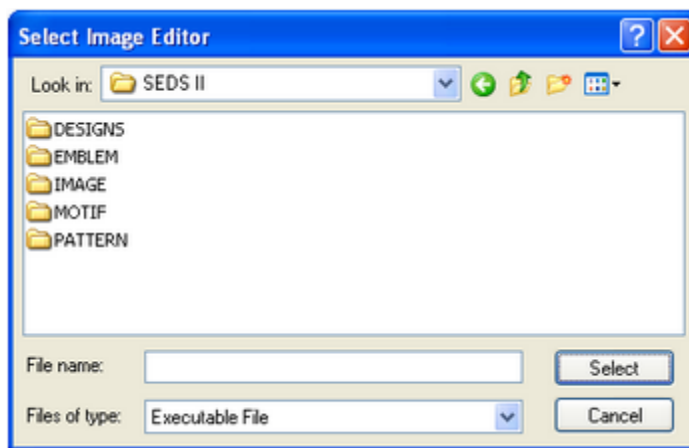


- **Rotate Angle**
Angle of rotation, positive values rotate clockwise and negative values counter clockwise.
- **Preview**
Preview the rotated image in the Design Window before confirmation.

5.1.7 Image Editing

You can invoke an external graphic editor to edit the image in the Design Window as follows:

1. Choose the graphic editor program by selecting **Select Image Editor** from the Edit Menu^[110]. The Select Image Editor dialog box will be shown as below:



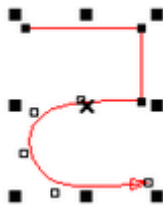
2. Change to the folder when the graphic editor program is located from **Look in**.
3. Enter the name of the graphic editor program (usually with an "exe" extension) in **File name**.
4. Click **Select** and this program will be selected as the default graphic editor (you don't need to select it each time if you are using the same program to edit).
5. Select **Image Edit** from the Edit Menu ^[11b]. This will invoke the default graphic editor and the current image will be opened automatically. Use the editor to do whatever modifications necessary. Upon finish, save the image and exit the graphic editor program. The modified image will appear in the current Design Window automatically.

5.2 About Objects

There are two types of object (also commonly known as vector): closed and open objects. A closed object is a continuous, circular path, as in an ellipse or a polygon. An open object, on the other hand, is a shape that does not form a complete loop, such as a line or an arc. While this may seem obvious, note that it is possible to create an object that appears to be closed (the ends of a curve appear to touch) but actually isn't. In SEDS II Achiever, objects are used to:

- As a base for stitches creation.
- Define the area of operation in the Photo Stitch function.
- Define the path (refer to On One Object ^[67] for more details) or envelope (refer to Between Two Objects ^[67] for more details) of lettering.

The shape of objects is defined by points called **Anchor Points**, which are points drawn by the user that determine its ends, degree of curvature or angle for any given area on that object. There are two types of anchor points: a corner point, and a curved point. Corner points are shown as small black filled-in squares while curved points are represented as open squares, shown in the figure below:



Refer to the following topics for more information on objects:

- Create an Object ^[36]
- Object Editing ^[38]
- Import Vector File ^[42]
- Export Objects ^[43]
- Auto Trace ^[44]

5.2.1 Create an Object

The object creation tools are located on the Primary Bar ^[114]. With the line/curve tool you can create arbitrary shape objects and with other tools like ellipse or rectangle, you can create regular shape objects. Refer to the followings for more details:

- Line & Curve ^[36]
- Circle & Ellipse ^[36]
- Square & Rectangle ^[37]
- Polygon/Star ^[37]
- Circular Arc ^[38]

5.2.1.1 Line & Curve

You can create a open or closed shape with combination of polylines and curves as show below:

1. Select the line  icon or the curve  icon from Line Toolbar ^[144] on the Primary Bar ^[114]. This will start the shape in 'line' or 'curve' mode respectively.
2. If 'line' mode is selected, click once in the Design Window will add a 'line' point to the shape, otherwise a 'curve' point will be added.
3. You can press the Backspace key on the keyboard to delete the last added point in case you make a mistake.
4. In the course of drawing a shape you can switch 'line' and 'curve' mode but selecting the  or the  icon, or by pressing F4 on the keyboard.
5. Double click on the last point of the shape to end.
6. To create a closed shape, move the cursor near the first point and when a small square appear on the first point double click to end.

5.2.1.2 Circle & Ellipse

Follow the steps below to create a circle or ellipse:

1. Select the ellipse  icon from Ellipse Toolbar ^[144] on the Primary Bar ^[114].
2. For circle, push down the  button on the Ellipse/Rectangle Options Bar ^[124] while for ellipse have it up.
3. With the  button up, if the  button is up, each click in the Design Window will define a diagonal point of the circle/ellipse. Otherwise the first point will be the center and the second point a circumference point.
4. Or, with the  button down, the first two points will define a center line of the circle/ellipse and the third point will control the height.

Follow the steps below to create concentric circles or ellipses:

1. Select the concentric ellipse  icon from Ellipse Toolbar ^[144] on the Primary Bar ^[114].
2. For concentric circles, push down the  button on the Ellipse/Rectangle Options Bar ^[124] while for concentric ellipses have it up.
3. With the  button up, if the  button is up, each click in the Design Window will define a diagonal point of the circle/ellipse. Otherwise the first point will be the center and the second point a circumference point.
4. Click 2 points in the Design Window to create the first circle/ellipse.
5. Continue to click in the Design Window will create circle/ellipse with the same center as the first one. Each point click will be circumference point.
6. Or, with the  button down, the first two points will define a center line of the circle/ellipse and the third point will control the height.
7. Click 3 points in the Design Window to create the first circle/ellipse.
8. A rubberband line with one end at the center of the first circle/ellipse will be shown. The first point clicked will define a 'radial'

center line and the second point will control the height. Continue to click pair of points to create concentric circle/ellipse as desired.

5.2.1.3 Square & Rectangle

Follow the steps below to create a square or rectangle:

1. Select the rectangle  icon from Rectangle Toolbar ^[145] on the Primary Bar ^[114].
2. For square, push down the  button on the Ellipse/Rectangle Options Bar ^[124] while for rectangle have it up.
3. With the  button up, if the  button is up, each click in the Design Window will define a diagonal point of the square/rectangle. Otherwise the first point will be the center and the second point a circumference point.
4. Or, with the  button down, the first two points will define an edge of the square/rectangle and the third point will control the height.

Follow the steps below to create concentric squares or rectangles:

1. Select the concentric rectangle  icon from Rectangle Toolbar ^[145] on the Primary Bar ^[114].
2. For concentric squares, push down the  button on the Ellipse/Rectangle Options Bar ^[124] while for concentric rectangles have it up.
3. With the  button up, if the  button is up, each click in the Design Window will define a diagonal point of the square/rectangle. Otherwise the first point will be the center and the second point a circumference point.
4. Click 2 points in the Design Window to create the first square/rectangle.
5. Continue to click in the Design Window will create square/rectangle with the same center as the first one. Each point click will be circumference point.
6. Or, with the  button down, the first two points will define an edge of the square/rectangle and the third point will control the height.
7. Click 3 points in the Design Window to create the first square/rectangle.
8. A rubberband line with one end at the center of the first square/rectangle will be shown. The first point clicked will define a 'radial' center line and the second point will control the height. Continue to click pair of points to create concentric square/rectangle as desired.

5.2.1.4 Polygon/Star

Follow the steps below to create a polygon or star shape:

1. For polygon, select the  icons from Polygon/Star Toolbar ^[145] on the Primary Bar ^[114]. For star shape, select the  icon.
2. For regular polygons or star shapes (sides of same length), push down the  button on the Polygon/Star Options Bar ^[124].
3. With the  button up, if the  button is up, each click in the Design Window will define a diagonal point of the polygon/star shape. Otherwise the first point will be the center and the second point a circumference point.
4. Input the number of sides in .
5. Click 2 points in the Design Window to create the polygon/star shape.
6. Or, with the  button down, the first two points will define an edge of the polygon/star shape and the third point will control the height.
7. Input the number of sides in .
8. Click 3 points in the Design Window to create the polygon/star shape.

5.2.1.5 Circular Arc

Follow the steps below to create a circular arc:

1. Select the circular arc  icon from Ellipse Toolbar [\[144\]](#) on the Primary Bar [\[114\]](#).
2. Move the cursor to one of the end points of the arc and click in the Design Window.
3. Move the cursor to any point of the arc and again click in the Design Window.
4. Move the cursor to the other end point of the arc and click in the Design Window to end.

5.2.2 Object Editing

Operations on objects, like move, resize, rotate, copy, delete, mirror etc are very similar to the corresponding operations for stitch blocks except you need to select the objects (refer to Select Object(s) [\[14\]](#) for more details) first instead of stitch blocks. Refer to the following for more details:

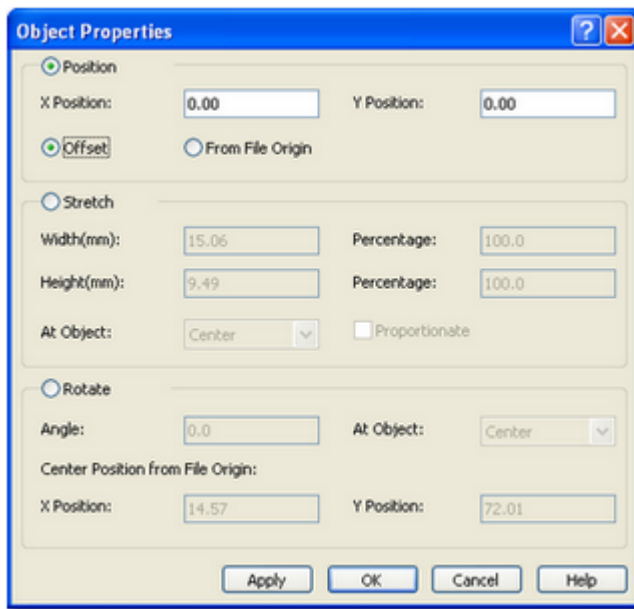
- Move/Resize Object(s) [\[38\]](#)
- Rotate Object(s) [\[39\]](#)
- Mirror Object(s) [\[40\]](#)
- Copy Object(s) [\[40\]](#)
- Delete Object(s) [\[40\]](#)
- Add/Delete Anchor Points [\[40\]](#)
- Geometric Transform [\[41\]](#)
- Cut Object [\[41\]](#)
- Join Object [\[42\]](#)
- Cut Closed Object [\[42\]](#)

5.2.2.1 Move/Resize Object(s)

Follow the steps below to move or resize object(s):

1. Select the object(s) you want to move/resize (refer to Selecting Object(s) [\[14\]](#) for more details).
2. The 9 move/resize control nodes shown below will be displayed at the boundary rectangle of the object(s).


3. To resize the object(s), hold down the mouse button on one of the 'square' control node. Drag the mouse and the object(s) will be re-sized in the direction corresponding to the position of the control node, e.g. if the bottom-right control node is used, the object(s) will be re-sized in the bottom-right direction. Release the mouse button to end.
4. To move the object(s), hold down the mouse button on the 'cross' control node at the center and drag the mouse to move the block(s). Release the mouse button to end.
5. You can also enter the exact size or position from the Object Properties Dialog Box [\[176\]](#), which can be opened by pressing F7 on the keyboard, or selecting Object Properties from the Edit Menu [\[110\]](#), as shown:



- To change position, select **Position** and input the values in **X Position** for horizontal displacement and **Y Position** for vertical displacement. The values entered will be relative to the original position if **Offset** is selected, or to the lower left corner of the file if **From File Origin** is selected.
- To change size, select **Stretch** and input the **Width** and/or **Height** in mm or as a percentage of the original values. Check **Proportionate** to maintain the original aspect ratio. You can also specify the Anchor Point of re-size (the point that doesn't move) in **At Object**.

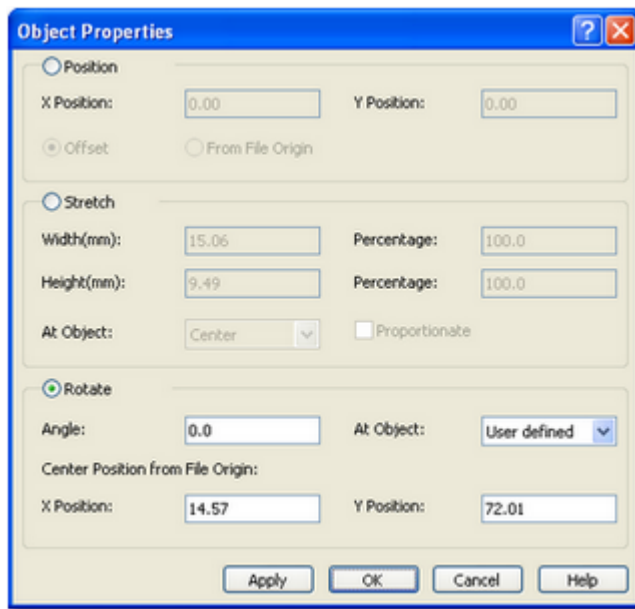
5.2.2.2 Rotate Object(s)

Follow the steps below to rotate object(s):

1. Select the object(s) you want to rotate (refer to Selecting Object(s) ^[14] for more details).
2. Click on the 'cross' control node at the center (refer to Move/Resize Objects(s) ^[38] for more details).
3. The 9 move/resize control nodes will be change to the 5 rotate control nodes, as shown below:



4. The 'circle' control node at the center denotes the center of rotation. Hold down the mouse button on it and drag the mouse to change its position. Release the mouse button to end.
5. To rotate the object(s), hold down the mouse button on one of the 'arc' control node at the corners and drag the mouse to rotate the block(s). Release the mouse button to end.
6. You can also enter the exact angle and/or the center of rotation from the Object Properties Dialog Box ^[176], which can be opened by pressing F7 on the keyboard, or selecting Object Properties from the Edit Menu ^[110], as shown:



- Select **Rotate** and input value in **Angle** for the rotation angle, and select the center of rotation from **At Object**. Note coordinates of the center of rotation relative to the lower left corner of the file will be shown in **X Position** and **Y Position**. If "User defined" is selected in **At Object**, you can input values in **X Position** and **Y Position** manually.

5.2.2.3 Mirror Object(s)

Follow the steps below to mirror object(s):

1. Select the object(s) you want to mirror (refer to Selecting Object(s) ^[14] for more details).
2. Select **X-Mirror** from the Edit Menu ^[11b] to mirror the object(s) in the horizontal direction.
3. Select **Y-Mirror** from the Edit Menu ^[11b] to mirror the object(s) in the vertical direction.

5.2.2.4 Copy Object(s)

Follow the steps below to copy object(s):

1. Select the stitch object(s) you want to copy (refer to Selecting Object(s) ^[14] for more details).
2. Select **Copy** from the Edit Menu ^[11b], or press Ctrl-C on the keyboard.
3. Select **Paste** from the Edit Menu ^[11b], or press Ctrl-V on the keyboard.
4. Move the cursor to the position you want to place the copied object(s) and click in the Design Window to end.

5.2.2.5 Delete Object(s)

Follow the steps below to delete object(s):

1. Select the object(s) you want to delete (refer to Selecting Object(s) ^[14] for more details).
2. Select **Delete** from the Edit Menu ^[11b], or press the **DEL** on the keyboard will delete the object(s).
3. Alternatively, select **Cut** from the Edit Menu ^[11b], or press Ctrl-X on the keyboard will also delete the object(s) but in addition a copy of the object(s) will be placed in the clipboard.

5.2.2.6 Add/Delete Anchor Points

Follow the steps below to add/delete anchor points of an object:

1. Select the object you want to add/delete anchor points (refer to Selecting Object(s) ^[14] for more details).

2. Select the  icon from the Object Manipulation Toolbar ^[145] on the Primary Bar ^[114]. Anchor points of the object will be shown as black filled or blank rectangles according to their type.
3. Select the anchor points for operation. For single point selection just click on the point. For multiple points selection, draw a box in the Design Window, which includes the points, or use CTRL/SHIFT clicks on points. CTRL clicks will toggle select/de-select of points and SHIFT click will select all points in the range between the first and second point.
4. To delete point(s), select **Delete** from the right-click context menu.
5. To add point(s), select **Insert Point** from the right-click context menu. Then click on the Design Window to add points where desired. Use the F4 key to toggle between line and curve points. Use the Backspace key to delete the last added point. Double click will add the last point and end the operation.
6. To auto delete points, select **Auto Delete Points** from the right-click context menu. The program will delete points that are closed to each other automatically.
7. To change the point(s) type from curve to line, select **Change to Line Point** from the right-click context menu.
8. To change the point(s) type from line to curve, select **Change To Pass-Point Curve Point** or **Change To Not-Pass-Point Curve Point** from the right-click context menu. Curve will lie on the Pass-Point anchor points but not on the Not-Pass-Point points.
9. You can also move the anchor points here if desired by dragging on one of the selected points.

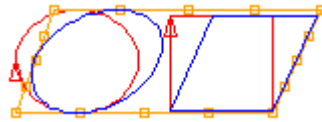
5.2.2.7 Geometric Transform

Follow the steps below to perform geometric transform, like slanting, on object(s):

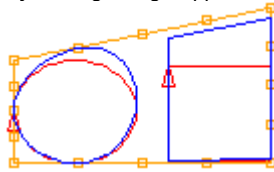
1. Select the object(s) you want to perform transformation (refer to Selecting Object(s) ^[14] for more details).
2. Select the  icon from the Object Manipulation Toolbar ^[145] on the Primary Bar ^[114]. A box envelope will be shown around the object(s) with control nodes drawn as blank rectangles.
3. Drag the control nodes to adjust the shape of the envelope, nodes on the 4 corners are line nodes while the others are curve nodes.

Tips:

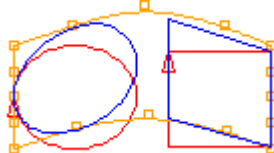
- By moving either both upper or both lower corner nodes to the left or right, lettering may be uniformly slanted in italicized fashion, as shown below:



- By moving a single upper corner node, perspective effects can be achieved, as shown below:



- By adjusting the center nodes on the upper and lower side to produce a dome shape lettering, as show below:



4. Select **Enter** from the right-click context menu or press the Enter key to confirm changes, or **Exit** from the right-click menu or the ESC key to discard changes and exit the function.

5.2.2.8 Cut Object

Follow the steps below to cut an single object into 2 objects:

1. Select the object you want to cut (refer to Selecting Object(s) ^[14] for more details).

2. Select the  icon from the Object Manipulation Toolbar ^[145] on the Primary Bar ^[114].
3. Draw a line in the Design Window, the object will be cut at the intersection of the object and the line.

5.2.2.9 Join Object

Follow the steps below to join 2 objects or close a single object:

1. Select one or two object(s) you want to join (refer to Selecting Object(s) ^[14] for more details).
2. Click the  icon from the Object Manipulation Toolbar ^[145] on the Primary Bar ^[114].
3. If 2 objects are selected, they will be combined to become a single object by adding a line at the nearest end points. If 1 opened object is selected, it will be closed by adding a line joining the start and the end points.

5.2.2.10 Cut Closed Object

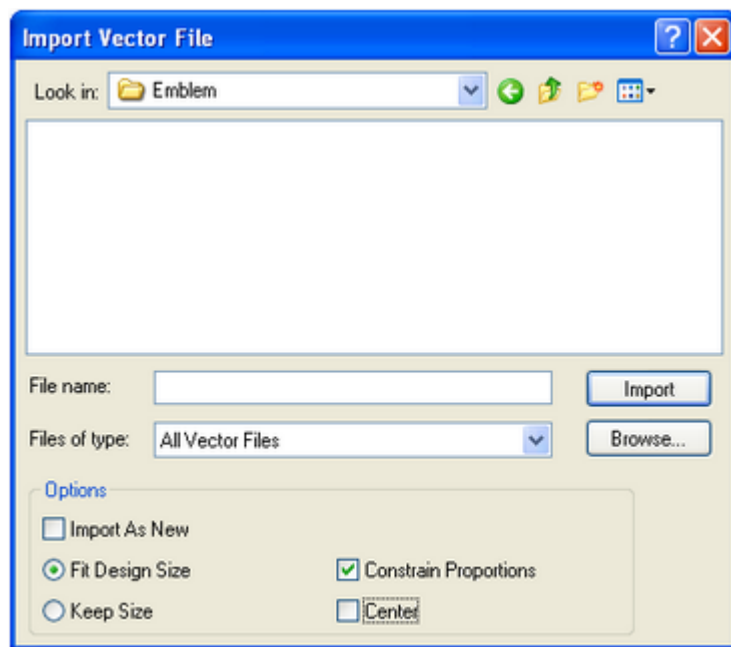
Follow the steps below to cut a closed object into 2 closed objects:

1. Select an closed object you want to cut (refer to Selecting Object(s) ^[14] for more details).
2. Select the  icon from the Object Manipulation Toolbar ^[145] on the Primary Bar ^[114].
3. Draw a line in the Design Window which must cross 2 points on the object.
4. The object will be cut into 2 objects at the 2 cross points with lines added joining the points.

5.2.3 Import Vector File

You can import a vector file created by other graphics programs as objects in SEDS II Achiever. To use, follow the steps below:

1. Select **Import Vector File** from Import submenu of the File Menu ^[108]. The Import Vector File Dialog Box ^[42] will be opened, as shown:



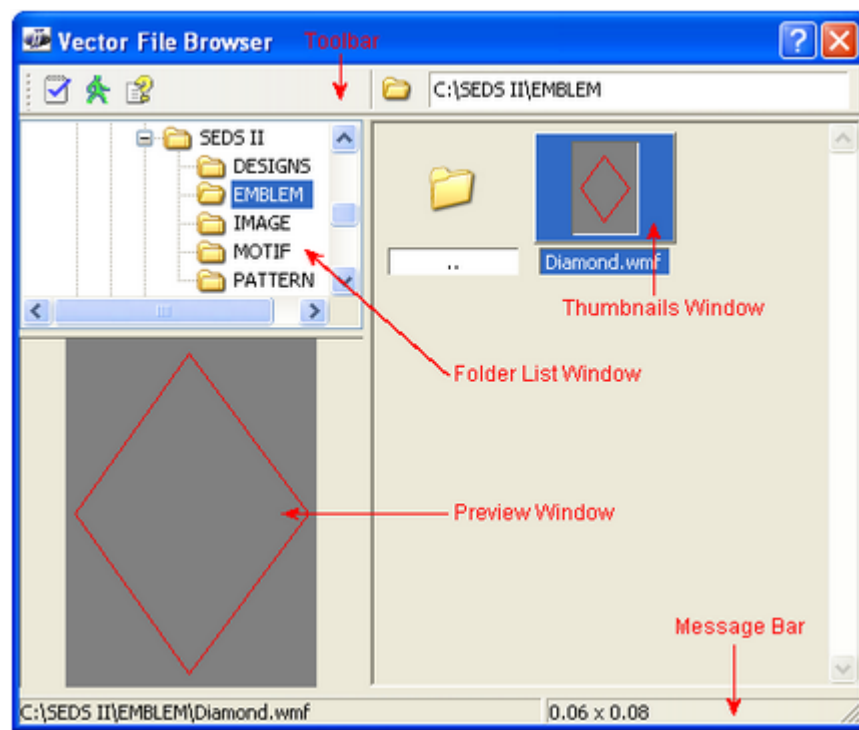
2. Select the folder where the vector file is located from **Look in**.
3. Select the vector file type, or use **All Vector Files**. The program now support WMF, EMF, PS and EPS formats.
4. Select the file from the file list window or if you know the name type it in **File name**.

5. Check **Import As New** if you want to import the vector file to a new design. The new design thus created will be of same size as the vector file.
6. If **Import As New** is not checked, choose between **Fit Design size** and **Keep Size**. **Fit Design Size** will scale the vectors to fit the size of the Design Window. **Keep Size** will import the vectors at their original size.
7. Check **Constrain Proportions** to keep the original aspect ratio if scaling is required. (Enabled only when **Fit Design Size** is selected.)
8. Check **Center** to put the vectors at the center of the Design Window. (Enabled only when **Keep Size** is selected.)
9. Click **Import** to import the vector file.

You can also click **Browse** to invoke the Vector File Browser ^[43] to import a vector file from there.

5.2.3.1 Vector File Browser

The Vector File Browser Dialog Box ^[173], as shown, will be displayed when you click on **Browse** in the Import Vector File Dialog Box ^[152]. This gives you thumbnail views of all the vector files in a folder.

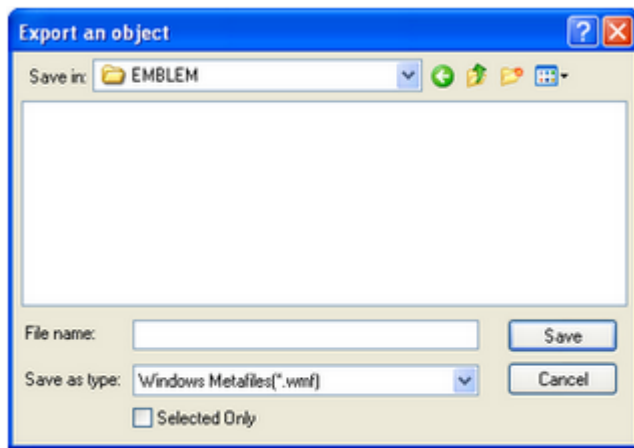


- Select a folder from the **Folder List Window**.
- To open a vector file, select it from the Thumbnail Window by clicking on the thumbnail and then click the  icon in the Toolbar, or double click on the thumbnail.

5.2.4 Export Objects

You can export the objects you created in SEDS II Achiever for use in other graphics programs, or to create new emblems. To use, follow the steps below:

1. Select **Export Objects** from the Export submenu of the File Menu ^[108].
2. The Export Objects Dialog Box ^[154] will be displayed, as shown:



3. Select the folder you want to save the image to from **Save in**.
4. Input a file name in **File name**.
5. Select a file format in **Save as type**, WMF and DXF formats are supported. Note that if saving objects for use as emblems, you MUST WMF format.
6. Check **Selected Only** to save the selected objects only, otherwise all the objects in the Design Window will be saved.
7. Click **Save** to save.

5.2.5 Auto Trace

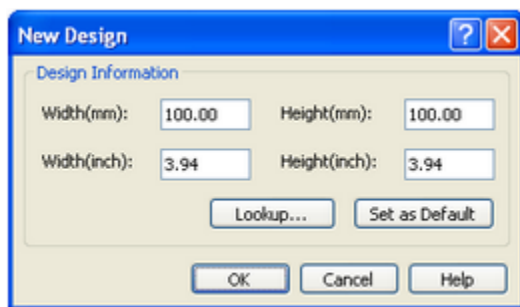
With this function, outline objects can be automatically created from the background image. This function work best if the background image is clear with distinguished colors. Use the Reduce Image Color^[33] function to reduce the colors in the image if necessary. To use, follow the steps below:

1. Import an background image (Refer to Import an Image^[31] for more details).
2. Select the **Auto Trace**  icon from the OneTouch Toolbar^[146] on the Stitch Creation Bar^[130].
3. Select a color from the Color Bar^[115].
4. Click at a point in the Design Window. An outline object will be created for the connected area (same color) at that point.
5. You can continue to click on other areas to create the outline objects as desired.

5.3 Create a New Design

To create a new design, follow the steps below:

1. Select the  icon from the Main Bar^[113], or select **New** from the File Menu^[108], the New Design Dialog Box^[148] will be displayed, as shown:



2. Input the design width and height in either mm or inch. Note that the values in mm or inch will be calculated automatically if one of them is changed.

3. Click **Set as Default** if you want to save the current sizes as the default sizes.
4. Click **Lookup** for preset hoop sizes for common machines.
5. Click **OK** to create the design. Note that the new design file will be named as "untitled??" and you will be asked to input the file name and path the first time you save the design.

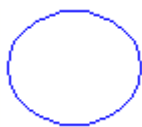
5.4 Basic Steps for Stitch Creation

Following are the basic steps required for successful stitch creation for most stitch types:

1. Create the object(s) (see Create an Object ^[36] for more details) that are required for a particular stitch type. Note that some stitch types, like fill stitch types, accept closed objects only while some accepts both, like line types. You can also import a vector file (see Import Vector File ^[42] for more details) as objects.
2. Select the object(s) (see Select Object(s) ^[14] for more details).
3. Select the stitch type from the Stitch Settings Bar ^[131].
4. Input the settings for the stitch type in the Stitch Settings Bar ^[131].
5. Select the  icon from the Stitch Creation Bar ^[130], or press Enter or CTRL+G on the keyboard.
6. The Options Bar ^[115] for the particular stitch type will appear. Select the required options.
7. For most stitch types, the objects selected will be highlighted and default In/Out points will appear, In point in green and Out point in Red. Drag the points to the desired positions. For some stitch types, like the satin, however, there are additional stages and follow the prompts on the Status Bar ^[148] to proceed. Press Enter on the keyboard or select **Enter** from the right-click context menu to go to the next stage.
8. Press Enter on the keyboard or select **Enter** from the right-click context menu.
9. The selected stitch type will be created and the **Manual Stitch** function will be invoked automatically after stitches are created.
10. Click on the Design Window to add manual stitches if desired.
11. Press ESC on the keyboard, or right-click in the Design Window and select **EXIT** from the context menu to end.

5.5 Fill Stitch Types

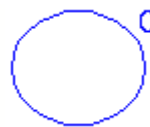
Fill stitch types require one or more closed objects. If more than one objects, one of them **MUST** enclose the others and they must **NOT** cross each other. The inner objects will be treated as holes during stitch creation. For example:



Correct



Correct



Incorrect



Incorrect

- To change the default settings for Fill Stitch Types, select **Settings Manager** from the Tools Menu ^[115] then select the **Fill** tab. See Fill Stitch Default Settings ^[78] for more details.

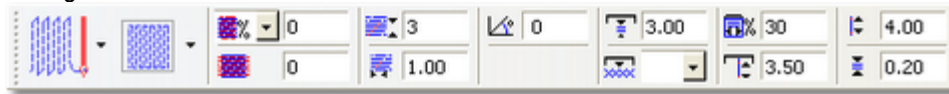
The following Fill Stitch Types are available:

- Normal Fill ^[45]
- Jagged Fill ^[46]
- Pattern Fill ^[46]
- Column Fill ^[47]
- Jagged Column Fill ^[48]

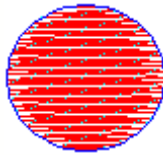
5.5.1 Normal Fill

Target

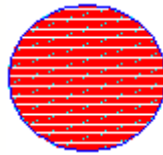
Closed object(s). If more than one, one of them **MUST** enclose the others and they must **NOT** cross each other.

Settings**Options****Procedures**

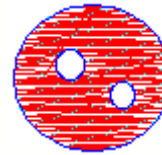
See Basic Steps for Stitch Creation [\[45\]](#) for details.

Examples

Without Boundary Stitches



With Boundary Stitches



With Holes

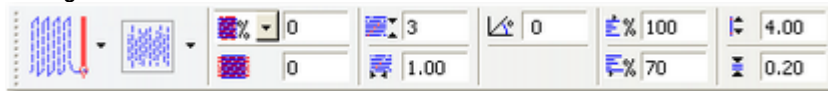
See Also

Jagged Fill [\[46\]](#), Gradual Fill, Pattern Fill [\[46\]](#), Column Fill [\[47\]](#), Jagged Column Fill [\[48\]](#)

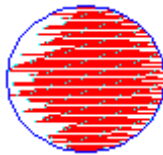
5.5.2 Jagged Fill

Target

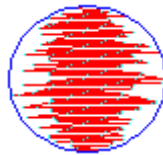
Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings**Options****Procedures**

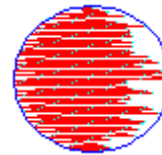
See Basic Steps for Stitch Creation [\[45\]](#) for details.

Examples

Left



Center



Right

See Also

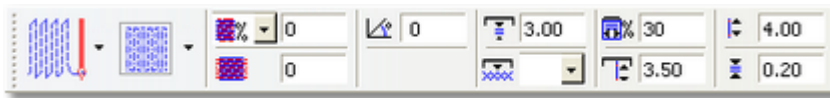
Normal Fill [\[45\]](#), Gradual Fill, Pattern Fill [\[46\]](#), Column Fill [\[47\]](#), Jagged Column Fill [\[48\]](#)

5.5.3 Pattern Fill

Target

Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings



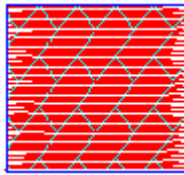
Options



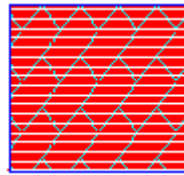
Procedures

1. Select a pattern using the Pattern Browser [165](#), see Select a Pattern [88](#) for more details.
2. See Basic Steps for Stitch Creation [45](#) for details.

Examples



Without Boundary Stitches



With Boundary Stitches

See Also

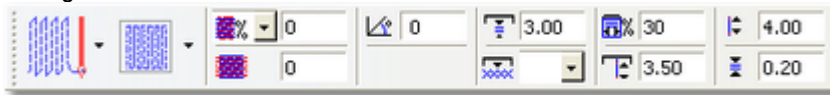
Pattern Manager [88](#), Normal Fill [45](#), Jagged Fill [46](#), Gradual Fill, Column Fill [47](#), Jagged Column Fill [48](#)

5.5.4 Column Fill

Target

Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings



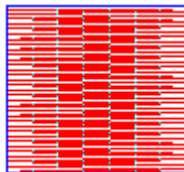
Options



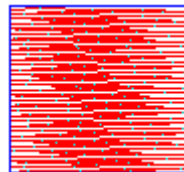
Procedures

See Basic Steps for Stitch Creation [45](#) for details.

Examples



Classic



Modern

See Also

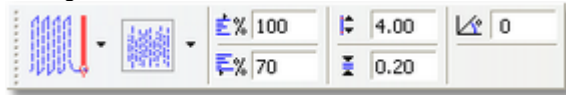
Normal Fill [45](#), Jagged Fill [46](#), Gradual Fill, Pattern Fill [46](#), Jagged Column Fill [48](#)

5.5.5 Jagged Column Fill

Target

Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings



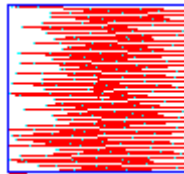
Options



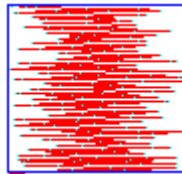
Procedures

See Basic Steps for Stitch Creation [\[45\]](#) for details.

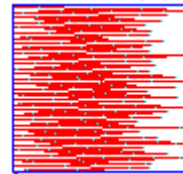
Examples



Left



Center



Right

See Also

Normal Fill [\[45\]](#), Jagged Fill [\[46\]](#), Gradual Fill, Pattern Fill [\[46\]](#), Column Fill [\[47\]](#)

5.6 Satin Stitch Types

Read the following topics about Auto-Span, Cornering and Guide Lines for better results when creating Satin Stitches.

- About Auto-Span [\[48\]](#)
- About Cornering [\[49\]](#)
- About Guide Lines [\[52\]](#)

To change the default settings for Satin Stitch Types, select **Settings Manager** from the Tools Menu [\[113\]](#) then select the **Satin** tab. See Satin Stitch Default Settings [\[79\]](#) for more details.

The following Satin Stitch Types are available:

- One Line Satin [\[52\]](#)
- Two Line Satin [\[53\]](#)
- Pattern Fill Satin [\[53\]](#)
- Jagged Satin [\[54\]](#)

5.6.1 About Auto-Span

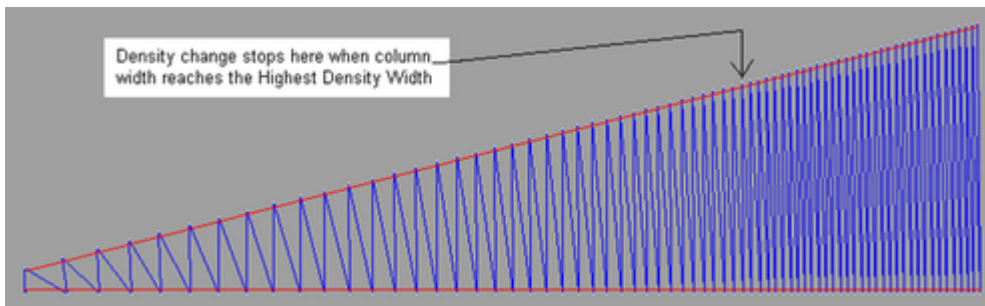


In a satin stitch block, when the width of the column changes drastically, it may require the Span to change accordingly. Auto-Span is designed to deal with such situation.

When Auto-Span is on, density of stitches is monitored by 'Minimum Span', 'Maximum Span' and 'Highest Density Width'.

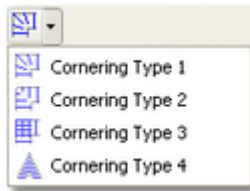
-  **Maximum Span**
This value controls the span when column width is at its narrowest, normally 0.1 mm. That means density of stitches is the lowest.
-  **Minimum Span**
This value controls the span when column width reaches the widest value preset by 'Highest Density Width'.
-  **Highest Density Width**
When column width is at the Highest Density Width, it will also be at its Minimum Span (Highest Density). Even when the stitch length goes beyond this value, density won't go any higher.

Example of Auto-Span: Density varies as column width changes.



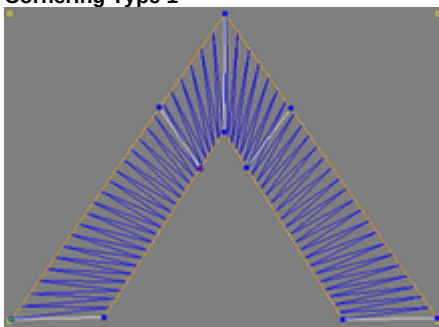
5.6.2 About Cornering

Four cornering options are devised, giving users more choices in dealing with cornering in satin stitches.



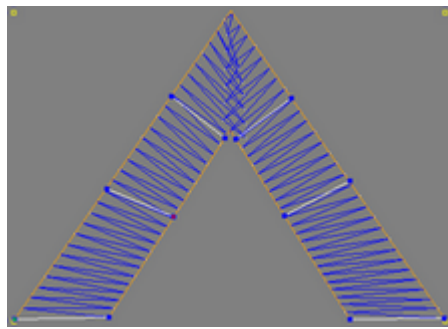
Forexamples:

- Two Line Satin
 - **Cornering Type 1**

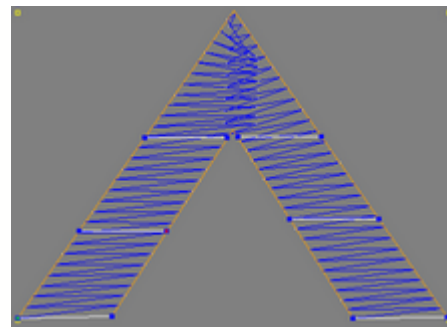


This is most commonly used type of cornering. The guide lines are applied the usual way.

- **Cornering Type 2**



(A)

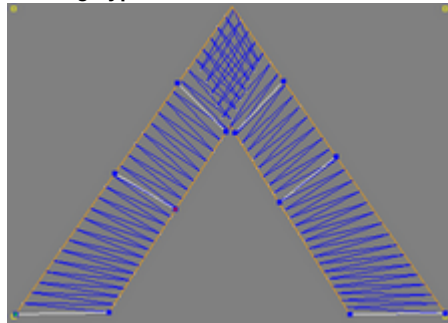


(B)

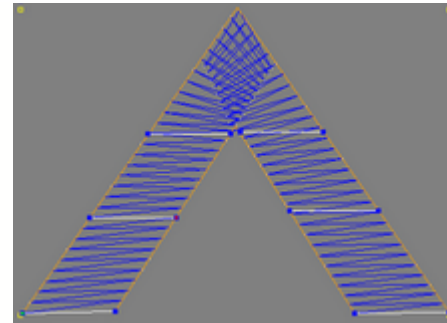
Stitching is from left to right. (A) and (B) show different ways of applying guide lines to achieve different effects.

For this corner type ONLY, the amount of overlap from the side that sews first is controlled by the  'Corner Compensation' setting, which is in mm.

- **Cornering Type 3**



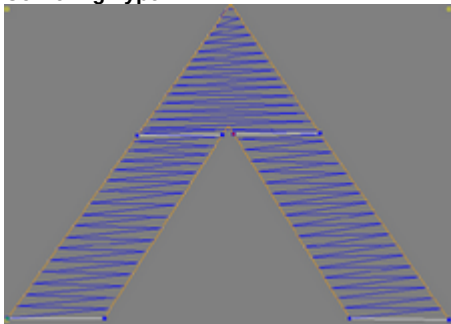
(A)



(B)

In this corner type, overlapping occurs fully on both sides, creating a more solid corner. (A) and (B) show different ways of applying guide lines to achieve different effects.

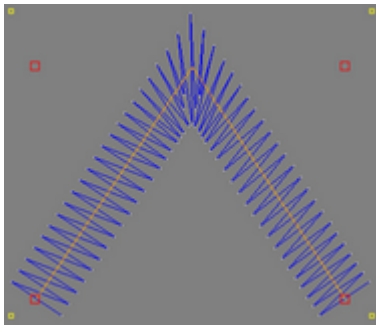
- **Cornering Type 4**



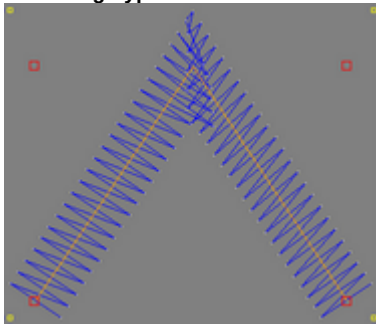
In this type, the system automatically put a 'capped' block connecting the stitches going into the corner and the stitches coming out of the corner. It's better to have 'Auto-Span' turned on to accommodate the stitch length variation.

- One Line Satin
For One Line Satin, there's no guide line to apply.

- **Cornering Type 1**

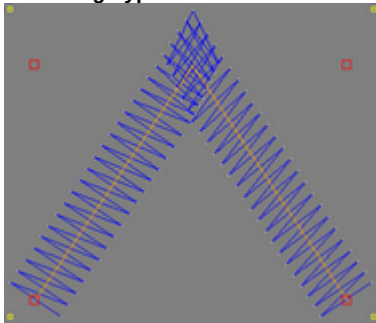


- **Cornering Type 2**

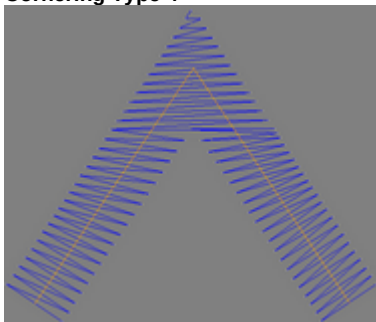


For this type, the amount of overlap can be controlled by the  'Corner Compensation' setting.

- **Cornering Type 3**



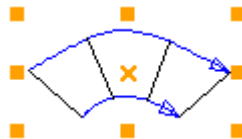
- **Cornering Type 4**



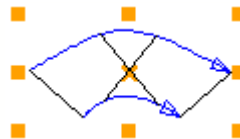
In Type 4, the system automatically put a 'capped' block connecting the stitches going into the corner and the stitches coming out of the corner. It's better to have 'Auto-Span' turned on to accommodate the stitch length variation.

5.6.3 About Guide Lines

Except for One Line Satin , which uses one object, other satin stitch types use two objects and require user to draw guide lines in addition to the objects. Guide lines are lines which have the two end points on each of the two objects. Guide lines MUST NOT cross each other, or unpredictable results may occur. For example: (guide lines shown in black color)



Correct

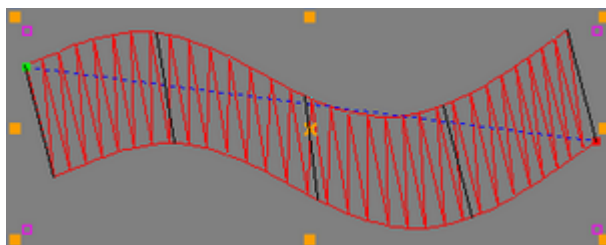


Incorrect

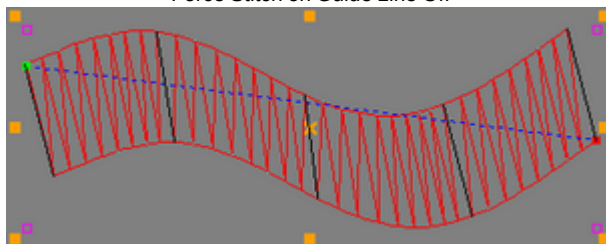
- To add a guide line, draw a line in the Design Window. The program will automatically truncate the line at the intersections of the 2 objects.
- To delete a guide line, click on it to select it first (it will be highlighted as a blue dotted line). Then select **Delete Guide Line** in the right-click context menu, or press the DEL key.
- To move a guide line, drag on one of the end points along the object.

You can think of the 2 objects being cut into blocks at the positions of the guide lines and stitches will be created for each block. If the

Force Stitch on Guide Line  button is on, the program will treat each block independently, otherwise stitches will be smooth out between blocks to produce a more even result. For example:



Force Stitch on Guide Line Off



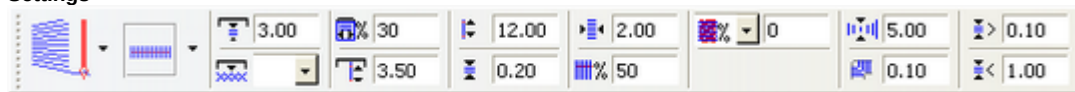
Force Stitch on Guide Line On

5.6.4 One Line Satin

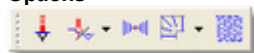
Target

One object, can be opened or closed.

Settings



Options

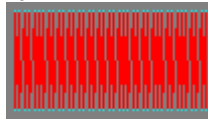


Procedures

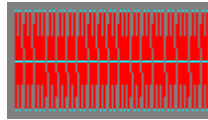
1. Follow the steps described in Basic Steps for Stitch Creation  up to step 7.

- Two offset lines will appear according to the **Offset** and **Width** settings. You can click and drag in the Design Window to adjust the offset lines.
- Follow the remaining steps in Basic Steps for Stitch Creation [\[45\]](#) to create the stitches.

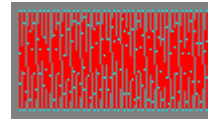
Examples



Needle Up



Needle Down, Random Inner Stitches Off



Needle Down, Random Inner Stitches On

See Also

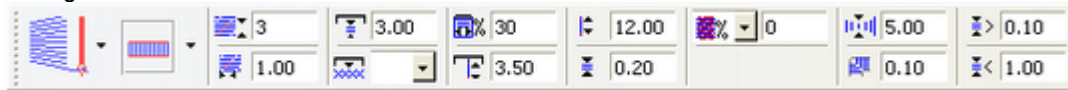
About Auto-Span [\[48\]](#), About Cornering [\[49\]](#), Two Line Satin [\[53\]](#), Pattern Fill Satin [\[53\]](#), Jagged Satin [\[54\]](#)

5.6.5 Two Line Satin

Target

Two object, can be opened or closed.

Settings



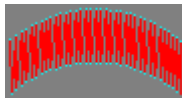
Options



Procedures

- Follow the steps described in Basic Steps for Stitch Creation [\[45\]](#) up to step 7.
- Two guide lines will be added at the ends of the objects automatically. Add or change the guide lines as desired.
- Follow the remaining steps in Basic Steps for Stitch Creation [\[45\]](#) to create the stitches.

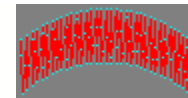
Examples



Needle Up



Needle Down, Random Inner Stitches Off



Needle Down, Random Inner Stitches On



Fill

See Also

About Auto-Span [\[48\]](#), About Cornering [\[49\]](#), About Guide Lines [\[52\]](#), One Line Satin [\[52\]](#), Pattern Fill Satin [\[53\]](#), Jagged Satin [\[54\]](#)

5.6.6 Pattern Fill Satin

Target

Two object, can be opened or closed.

Settings



Options**Procedures**

1. Select a pattern using the Pattern Browser [165], see Select a Pattern [88] for more details.
2. Follow the steps described in Basic Steps for Stitch Creation [45] up to step 7.
3. Two guide lines will be added at the ends of the objects automatically. Add or change the guide lines as desired.
4. Follow the remaining steps in Basic Steps for Stitch Creation [45] to create the stitches.

Examples**See Also**

About Guide Lines [52], Pattern Manager [88], One Line Satin [52], Two Line Satin [53], Jagged Satin [54]

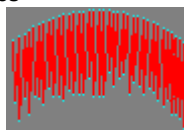
5.6.7 Jagged Satin

Target

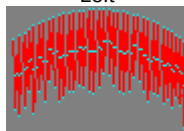
Two object, can be opened or closed.

Settings**Options****Procedures**

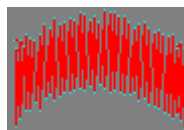
1. Follow the steps described in Basic Steps for Stitch Creation [45] up to step 7.
2. Two guide lines will be added at the ends of the objects automatically. Add or change the guide lines as desired.
3. Follow the remaining steps in Basic Steps for Stitch Creation [45] to create the stitches.

Examples

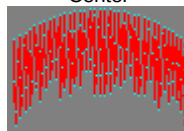
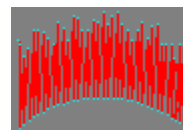
Left



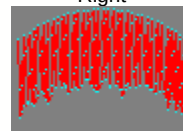
Needle Down



Center

Needle Down, Random Inner Stitches
On

Right



Fill

See Also

About Auto-Span [48], About Guide Lines [52], One Line Satin [52], Two Line Satin [53], Pattern Fill Satin [53]

5.7 Line Stitch Types

To change the default settings for Line Stitch Types, select **Settings Manager** from the Tools Menu [\[113\]](#) then select the **Line** tab. See Line Stitch Default Settings [\[81\]](#) for more details.

The following Line Stitch Types are available:

- Single Line [\[55\]](#)
- Double Line [\[55\]](#)
- E-Stitch [\[56\]](#)
- Bean Stitch [\[56\]](#)

5.7.1 Single Line

Target

One object, can be opened or closed.

Settings



Options



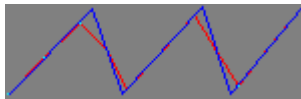
Procedures

See Basic Steps for Stitch Creation [\[45\]](#) for details.

Examples



Adjust to Path On



Adjust to Path Off

See Also

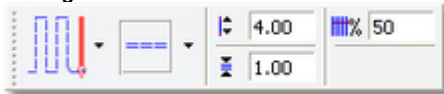
Double Line [\[55\]](#), E-Stitch [\[56\]](#), Bean Stitch [\[56\]](#), Chain Stitch

5.7.2 Double Line

Target

One object, can be opened or closed.

Settings



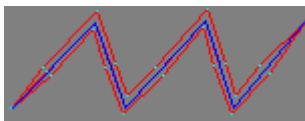
Options



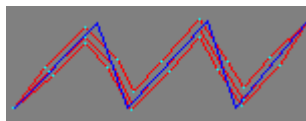
Procedures

See Basic Steps for Stitch Creation [\[45\]](#) for details.

Examples



Adjust to Path On



Adjust to Path Off

See Also

Single Line [55](#), E-Stitch [56](#), Bean Stitch [56](#), Chain Stitch

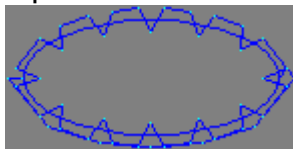
5.7.3 E-Stitch

Target

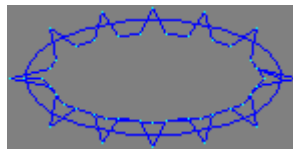
One object, can be opened or closed.

Settings**Options****Procedures**

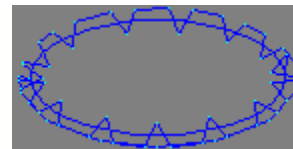
See Basic Steps for Stitch Creation [45](#) for details.

Examples

Inside



Outside



Scale Off

See Also

Single Line [55](#), Double Line [55](#), Bean Stitch [56](#), Chain Stitch

5.7.4 Bean Stitch

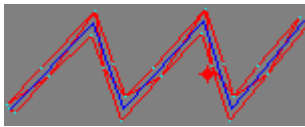
Target

One object, can be opened or closed.

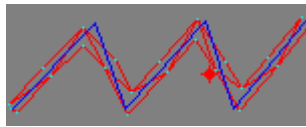
Settings**Options****Procedures**

See Basic Steps for Stitch Creation [45](#) for details.

Examples



Adjust to Path On



Adjust to Path Off

See Also

Single Line [55](#), Double Line [55](#), E-Stitch [56](#), Chain Stitch

5.8 Special Stitch Types

SEDS II Achiever supports many special stitch types, see the following topics for more details.

- Line Motif [57](#)
- Fill Motif [57](#)
- Cross Stitch [58](#)
- Photo Stitch [59](#)

5.8.1 Line Motif

Target

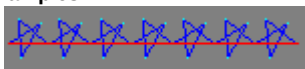
One object, can be opened or closed.

Settings**Options****Procedures**

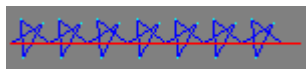
1. Select a motif using the Motif Browser [167](#), see Select a Motif [91](#) for more details.
2. See Basic Steps for Stitch Creation [45](#) for details.

Notes

- To change the default settings for Line Motif, select **Settings Manager** from the Tools Menu [113](#) then select the **Motif** tab. See Motif Stitch Default Settings [82](#) for more details.

Examples

Scale On



Scale Off

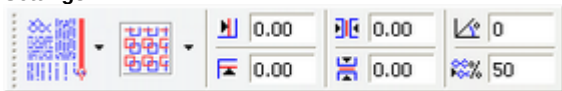
See Also

Motif Manager [91](#), Fill Motif [57](#)

5.8.2 Fill Motif

Target

Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings

Options



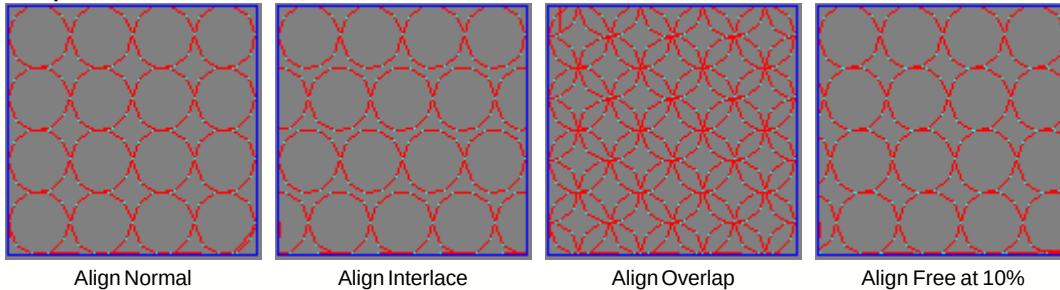
Procedures

1. Select a motif using the Motif Browser [167](#), see Select a Motif [91](#) for more details.
2. See Basic Steps for Stitch Creation [45](#) for details.

Notes

- To change the default settings for Fill Motif, select **Settings Manager** from the Tools Menu [113](#) then select the **Motif** tab. See Motif Stitch Default Settings [82](#) for more details.

Examples



See Also

Motif Manager [91](#), Line Motif [57](#)

5.8.3 Cross Stitch

Target

Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings



Options



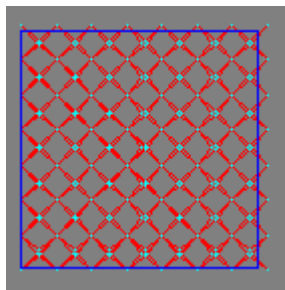
Procedures

See Basic Steps for Stitch Creation [45](#) for details.

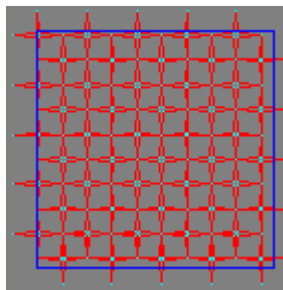
Notes

- To change the default settings for Cross Stitch, select **Settings Manager** from the Tools Menu [113](#) then select the **Cross** tab. See Cross Stitch Default Settings [83](#) for more details.

Examples



0 degree



45 degree

See Also

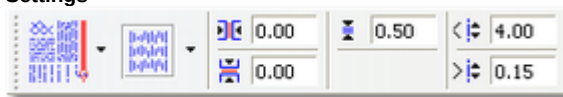
Fill Motif [57](#)

5.8.4 Photo Stitch

Target

Background Image. Closed object(s). If more than one, one of them MUST enclose the others and they must NOT cross each other.

Settings



Options



Procedures

1. Import an image (Refer to Import an Image [31](#) for more details). You can use both black & white or color photographic images for Photo Stitch.
2. If the partial processing is desired, create closed objects that define the processing area and select them all afterwards. The outmost object will define the outside boundary of the area and the inner objects, if presents, will be holes.



3. Select the  and  from the Stitch Settings Bar [131](#).

4. Select the  icon from the Stitch Creation Bar [130](#), or press Enter or CTRL+G on the keyboard.

5. Input the settings in the Stitch Settings Bar [131](#).

6. Select the required options. Type 1 to Type 4 are for black & white photos, while Color Type 1 and Color Type 2 are for color photos. Note that selecting the 'on black' modes will produce a 'negative' effect which is useful for sewing on dark color fabrics using light color threads. For the color types, stitches will be created in the 4 basic colors CMYK. When sewing you have to use

threads in these 4 colors for good results. Press the **Partial**  button down if partial processing is desired.

7. Press Enter on the keyboard or select **Enter** from the right-click context menu to start processing.

Notes

- To change the default settings for Photo Stitch, select **Settings Manager** from the Tools Menu [113](#) then select the **Photo** tab. See Photo Stitch Default Settings [84](#) for more details.

Examples



Original image in black & white



Type 1 on White



Type 2 on White



Type 3 on white



Type 4 on white



Original image in color

See Also

Import an Image 

5.9 Lettering

5.9.1 Create Lettering on Screen

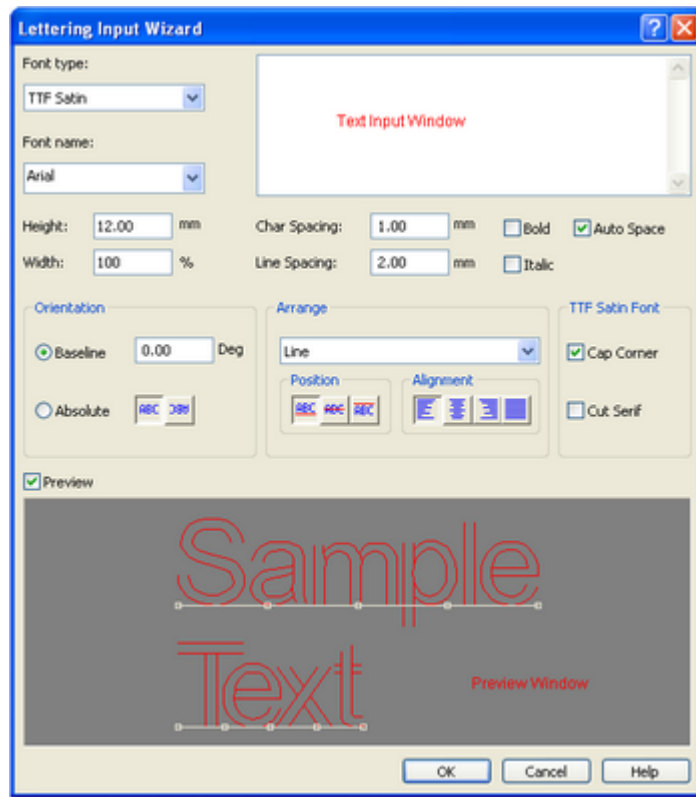
To create lettering on screen, follow the steps below:

1. Select the **Lettering**  icon from the Primary Bar , the Lettering Settings Bar  and Lettering Input Options Bar  will be shown.
2. Select a font type from the **Font Type** pull-down box on the Lettering Input Options Bar . There are 4 options, TTF Fill, TTF Satin, SEDS Fill and SEDS Satin. The SEDS types are our proprietary pre-digitized fonts.
4. Select a font from the **Font Name** pull-down box on the Lettering Input Options Bar . Note that a small preview window will be displayed on the left side of the pull-down box showing how the selected font look likes.
5. Push the  button on the Lettering Input Options Bar  down will to turn on 'bold' effect if desired.
6. Push the  button on the Lettering Input Options Bar  down will to turn on 'italic' effect if desired.
7. Input the **Character Height**, **Character Width**, **Character Space** and **Line Space** values on the Lettering Settings Bar  if desired. Note that The **Character Width** is expressed as a percentage of the normal width of the characters relative to the **Character Height**.
8. Select one of the transform options from the Lettering Transformation Options  on the Lettering Settings Bar . For the **One Object** option you need to select an object in advance and for **Between Two Lines**, you need to select 2 objects in advance. See Lettering Editing  for more details about transform options.
8. Click on the Design Window at where you want to put the lettering. A rectangular shape cursor in the selected transform options will be displayed.
9. Type in the characters. They will be shown real time in the Design Window as you type.
10. Right-click in the Design Window and select **Enter** from the context menu when finish inputting.
11. The program will jump to the editing mode automatically (see Lettering Editing  for more details). Edit the lettering as desired and right-click in the Design Window and select **Enter** when finished.

5.9.2 Create Lettering with Lettering Input Wizard

To create lettering with Lettering Input Wizard, follow the steps below:

1. Select **Lettering Input Wizard** from the Tools Menu , the Lettering Input Wizard  will be shown as below:



2. Select a font type from **Font Type**. There are 4 options, TTF Fill, TTF Satin, SEDS Fill and SEDS Satin. The SEDS types are our proprietary pre-digitized fonts. For TTF, the same font can be used for Fill and Satin.
3. Select a font from **Font Name**. Note that a small preview window will be displayed on the left side of the pull-down box showing how the selected font look likes.
4. Input the **Height**, **Width**, **Char Spacing** and **Line Spacing** values if desired. The **Width** is expressed as a percentage of the normal width of the characters relative to the height.
5. Check **Bold** to turn on 'bold' effect for TTF fonts if desired.
6. Check **Italic** to turn on 'italic' effect for TTF fonts if desired.
7. Check **Auto Space** to allow the program to even the spacing between characters automatically.
8. You can set the orientation of the characters in 2 ways, **Baseline** or **Absolute**. If lettering is arranged on a baseline object, such as Line, Vertical Line, Arc, Ellipse and Free Line, if **Baseline** is selected, the orientation angle is always relative to the baseline. Otherwise if **Absolute** is selected, the orientation angle is always relative to the horizontal line. For arrange in Box, select **Absolute** will change the angle of the box instead.
9. Click  to have letterings in the normal orientation or click  to have them inverted (flipped and mirrored).
10. Select from **Arrange** how the lettering is to be placed, None (free on the design), Box (within a box), Line (on a straight line), Vertical Line (on a vertical line), 2 Lines (between 2 straight lines), Diamond (within a diamond shape), Arc (on an arc), Ellipse (on an ellipse), Free Line (on a user drawn curve/line) or 2 Free Lines (between 2 user drawn curves/lines).
11. Select from **Position** where the lettering will be placed when arranged on Line, Vertical Line, Arc, Ellipse and Free Line. Choose  to place the lettering above the object,  to place at center the object or  to place below the object.
12. Select from **Alignment** the alignment option between,  (align left),  (align center),  (align right) or  (span the width of object).
13. For TTF Satin fonts, check **Cap Corner** to use Cap Cornering options when generating stitches. Check **Cut Serif** to have serifs generated as separated stitch blocks.
14. Check **Preview** to display "Sample Text" in the preview window according to the options used.
15. Click **OK** will close the Text Input Wizard. Follow the instructions on the Status Bar  to finish the function. If text is entered in the Text Input Window, the text will be used, otherwise the program will prompt you to input the text on screen. Note that if you select Arc, Ellipse, Free Line or 2 Free Line, the program will prompt you to draw the particular object first before placing the

lettering on it. After drawing an object, you can modify it by click and drag on the control points. Press the Enter key on the keyboard or select **Enter** from the right-click menu to advance to the next step. The program will jump to the editing step before the lettering is finally created. Refer to Lettering Editing [63] for more details.

5.9.3 Lettering Editing

Lettering Editing will be invoked automatically as the last stage when using the Lettering Input Wizard, or when you click on the  icon from the Primary Bar [114] when a lettering is selected.

In Lettering Editing mode, you can reshape, resize, align, re-position lettering in different ways. The Lettering Settings Bar [131] will be shown together with one of the following accompanying Options Bar:

- Lettering in Box/Diamond Options Bar [115] (if Box or Diamond is selected)
- Lettering on 1 Line Options Bar [116] (if Line or Vertical Line is selected)
- Lettering between 2 Lines Options Bar [116] (if 2 Lines is selected)
- Lettering on 1 Object Options Bar [116] (if Arc, Ellipse, or Free Line is selected)
- Lettering between 2 Objects Options Bar [117] (if 2 Free Lines is selected)

Below list the functions you can perform in the Lettering Editing mode :

- **Change Font Type to Another Font**

Select the desire Font Type and Font from the Lettering Input Options Bar [115]. Note that the  and  icons are enabled for TTF fonts only.

- **Character(s) Editing**

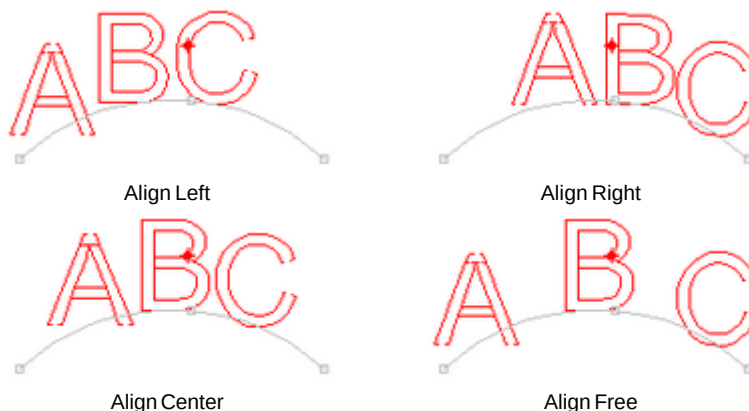
Select a character to edit by clicking on one of the edges. You can select multiple characters by pressing the CTRL key on the keyboard and click on the characters. 4 character control nodes will be displayed as show below when a character is selected.



1. Drag the 'circle' control node will move the character along the base path.
2. Drag the 'square' control node will resize the character.
3. Drag the 'arc' control node will rotate the character, centered at the 'circle' control node.
4. Drag the 'cross' control node to freely move the character.

- **Alignment**

You can set alignment of the lettering from the Alignment Options [126] on the accompanying Options Bar. An example is shown below:



- **Auto-Spacing**

By default, auto-spacing is turned on (the  button on the accompanying Options Bar is down). When this is on, the spacing

between characters will be adjusted automatically so that they look more even. An example is shown below:



Auto-spacing on



Auto-spacing off

- **Absolute Angle** (available in Line, Vertical Line, Arc, Ellipse and Free Line only)

If the  button is down, the angle of the characters are relative to the horizontal line, otherwise it is relative to the base object. An example is shown below, with Angle = 30 degree :



Absolute Angle on



Absolute Angle off

- **Positioning** (available in Line, Vertical Line, Arc, Ellipse and Free Line only)

You can set the position of the lettering relative to the base object from the Position Options . An example is shown below:



Above Object



Center Object



Below Object

- **Orientation**

You can change the orientation of the lettering from the Orientation Options . An example is shown below:



Normal



Inverted

- **Control Nodes** (available in Box, Diamond, Line and 2 Lines only)

You can change the number and function of the control nodes from the Control Nodes Options . An example is shown below:



3 Curve Nodes



1 Curve Node



3 Line Node



1 Line Node

5.9.3.1 Within Box (Box)

This function is mainly used to reshape or resize lettering. To use, follow the steps below:

1. Select a lettering and click on the  icon from the Primary Bar ^[114].
2. Click on the  icon from the Lettering Transformation Options ^[131] on the Lettering Settings Bar ^[131]. The lettering will appear in a box surrounded by control nodes as shown below:



3. The number of control nodes on each side and their attributes (line or curve) can be selected from the Control Nodes Options ^[126], or from the right-click context menu.
4. Drag on the control nodes to reshape the lettering.

Tips:

- By moving either both upper or both lower corner nodes to the left or right, lettering may be uniformly slanted in italicized fashion, as shown below:



- By moving a single upper corner node, perspective effects can be achieved, as shown below:



- Using 1 curve control node and adjust the center nodes on the upper and lower side to produce a dome shape lettering, as shown below:



5. You can adjust the size, angle, location of each character as described in Lettering Editing ^[63].
6. Right-click in the Design Window and select **Enter** from the context menu to end.

5.9.3.2 On One Line (Line, Vertical Line)

This function is mainly used to change the base path or rotate lettering. To use, follow the steps below:

1. Select a lettering click on the  icon from the Primary Bar ^[114].
2. Click on the  icon from the Lettering Transformation Options ^[131] on the Lettering Settings Bar ^[131]. The lettering will appear on a line with control nodes as shown below:



3. The number of control nodes on each side and their attributes (line or curve) can be selected from the Control Nodes Options ^[126], or from the right-click context menu.
4. Drag on the control nodes to change the base path or rotate the lettering.

Tips:

- Move one of the end nodes to will rotate the lettering as a whole, as shown below:



- Using 1 curve control node and adjust the center node to place the lettering on an arc, as show below:



5. You can adjust the size, angle, location of each character as described in Lettering Editing^[63].
6. Right-click in the Design Window and select **Enter** from the context menu to end.

5.9.3.3 Between Two Lines (2 Lines)

This function is mainly used to place lettering in the envelope between 2 lines. To use, follow the steps below:

1. Select a lettering click on the  icon from the Primary Bar^[114].
2. Click on the  icon from the Lettering Transformation Options^[131] on the Lettering Settings Bar^[131]. The lettering will appear between 2 lines with control nodes as shown below:



3. The number of control nodes on each side and their attributes (line or curve) can be selected from the Control Nodes Options^[126], or from the right-click context menu.
4. Drag on the control nodes to change shape of the envelope.

Tips:

- By moving a single upper corner node, perspective effects can be achieved (unlike in the Within Box^[65] function, the transformation is linear here which means that characters are scaled in the vertical direction only), as shown below:



- Using 1 curve control node and adjust the center nodes of the upper and lower lines to an uneven dome shape envelope, as show below:



5. You can adjust the size, angle, location of each character as described in Lettering Editing^[63].
6. Right-click in the Design Window and select **Enter** from the context menu to end.

5.9.3.4 Within Diamond Shape (Diamond)

This function is mainly used to reshape lettering to a diamond shape. To use, follow the steps below:

1. Select a lettering click on the  icon from the Primary Bar^[114].
2. Click on the  icon from the Lettering Transformation Options^[131] on the Lettering Settings Bar^[131]. The lettering will appear in a diamond shape surrounded by control nodes as shown below:



3. The number of control nodes on each side and their attributes (line or curve) can be selected from the Control Nodes Options ^[126], or from the right-click context menu.
4. Drag on the control nodes to change the diamond shape.
5. You can adjust the size, angle, location of each character as described in Lettering Editing ^[63].
6. Right-click in the Design Window and select **Enter** from the context menu to end.

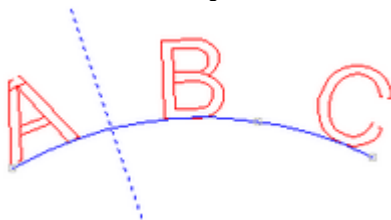
5.9.3.5 On One Object (Arc, Ellipse, Free Line)

This function is mainly used to change the baseline object of a lettering. To use, follow the steps below:

1. Select a lettering and click on the  icon from the Primary Bar ^[114].
2. Click on the  icon from the Lettering Transformation Options ^[131] on the Lettering Settings Bar ^[131]. The lettering with its baseline object will be shown as below: (Note that if the lettering is not created using one of Arc, Ellipse or Free Line, the  will be disabled.)



3. You can adjust the baseline object by click and drag the control points shown as gray small squares.
4. You can split the baseline object into 2 parts and place the lettering on either by:
 - Draw a line in the Design Window to cut the baseline object into 2 parts.



- Click on either part to select it, the lettering will be automatically placed on the selected part.



5. You can adjust the size, angle, location of each character as described in Lettering Editing ^[63].
6. Right-click in the Design Window and select **Enter** from the context menu to end.

5.9.3.6 Between Two Objects (2 Free Lines)

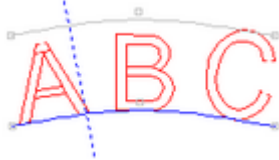
This function is mainly used to change the 2 envelope objects of a lettering. To use, follow the steps below:

1. Select a lettering click on the  icon from the Primary Bar ^[114].
2. Click on the  icon in the Lettering Transformation Options ^[131] on the Lettering Settings Bar ^[131]. The lettering with its

envelope objects will be shown as below:



3. You can adjust the envelope objects by click and drag the control points shown as gray small squares.
4. You can split the baseline object (the one where the lettering sits on) into 2 parts and place the lettering on either by:
 - Draw a line in the Design Window to cut the baseline object into 2 parts.



- Click on either part to select it, the lettering will be automatically placed on the selected part.



5. You can adjust the size, angle, location of each character as described in Lettering Editing ^[63].
6. Right-click in the Design Window and select **Enter** from the context menu to end.

5.9.3.7 Using Lettering Input Wizard

After creating a lettering, you can use the Text Input Wizard to change the text and any other properties available. This can be done by:

1. Select a lettering.
2. Press F8 on the keyboard, or select **Lettering Properties** from the Edit Menu ^[110]. This will invoke the Text Input Wizard, with the text and all relating properties of the lettering set. Follow the descriptions found in Create Lettering with Text Input Wizard ^[61] to change the properties and/or text.

5.9.4 Lettering Stitch Types

The following Lettering Stitch Types are available:

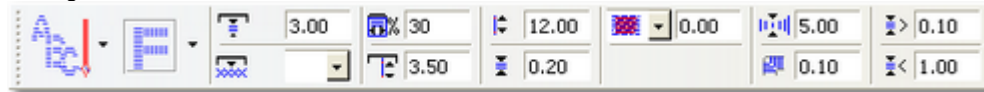
- Satin Lettering ^[68]
- Normal Fill Lettering ^[69]
- Line Stitch Lettering ^[70]
- Column Fill Lettering ^[71]

5.9.4.1 Satin Lettering

Target

Satin Type Lettering.

Settings



Options

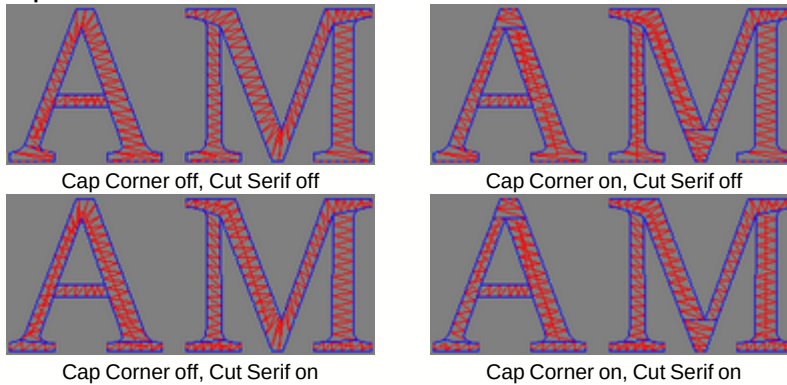


Procedures

See Basic Steps for Stitch Creation [45](#) for details.

Notes

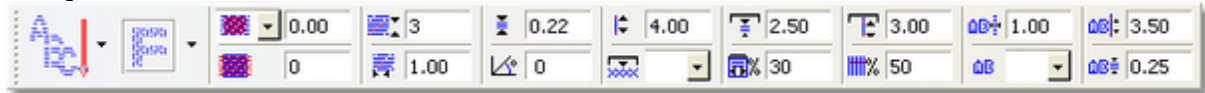
To change the default settings for Satin Lettering, select **Settings Manager** from the Tools Menu [113](#) then select the **Satin Lettering** tab. See Satin Lettering Default Settings [85](#) for more details.

Examples**See Also**

About Auto-Span [48](#), About Cornering [49](#), About Guide Lines [52](#)

5.9.4.2 Normal Fill Lettering**Target**

Fill Type Lettering.

Settings**Options****Procedures**

See Basic Steps for Stitch Creation [45](#) for details.

Notes

To change the default settings for Normal Fill Lettering, select **Settings Manager** from the Tools Menu [113](#) then select the **Fill Lettering** tab. See Fill Lettering Default Settings [86](#) for more details.

Examples



Without Border



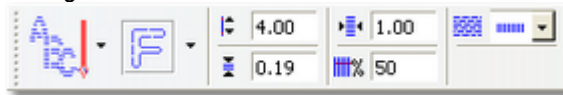
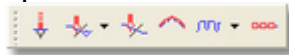
With Satin Border



With Bean Stitch Border

See AlsoNormal Fill [\[45\]](#)**5.9.4.3 Line Stitch Lettering****Target**

Fill Type Lettering.

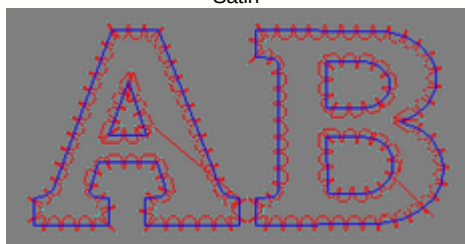
Settings**Options****Procedures**See Basic Steps for Stitch Creation [\[45\]](#) for details.**Notes**To change the default settings for Line Stitch Lettering, select **Settings Manager** from the Tools Menu [\[113\]](#) then select the **Line Lettering** tab. See Line Lettering Default Settings [\[87\]](#) for more details.**Examples**



Satin



Double Line



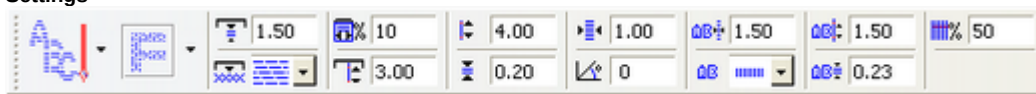
E-Stitch

See Also

Single Line [\[55\]](#), Double Line [\[55\]](#), E-Stitch [\[56\]](#), Bean Stitch [\[56\]](#)

5.9.4.4 Column Fill Lettering**Target**

Fill Type Lettering.

Settings**Options****Procedures**

See Basic Steps for Stitch Creation [\[45\]](#) for details.

Notes

To change the default settings for Column Fill Lettering, select **Settings Manager** from the Tools Menu [\[113\]](#) then select the **Fill Lettering** tab. See Fill Lettering Default Settings [\[86\]](#) for more details.

Examples

Classic



Modern

See Also

Column Fill [\[47\]](#)

5.10 Insert Manual/Jump Stitches

To insert manual (running)/jump stitches in a design, follow the procedures below:

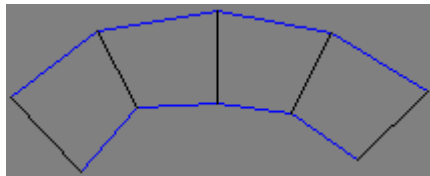
- Select a stitch block. Manual/jump stitch will be added starting at the end of this stitch block. If no stitch block is selected, the manual/jump stitches will be added to the end of the design, following the last stitch block.
- Click on the **Manual Stitch**  icon for manual stitches or the **Jump Stitch**  icon for jump stitches from the Manual Stitch Toolbar ^[146] on the Stitch Creation Bar ^[130]. If a stitch block is selected, a stitch/jump line will be attached to the end of the block.
- Click on the Design Window one at a time to add stitch by stitch.
- Double click when finish.

5.11 Freehand Satin

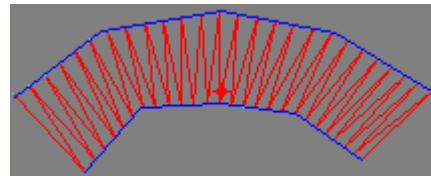
This function is similar to Two Line Satin ^[53] except that you don't have to draw the 2 objects in advance. Instead, you draw the object as alternate "point pairs" in the Design Window within the function and satin stitch will be created at the end. To use this function, follow the steps below:

1. Select the **Freehand Satin**  from the Stitch Creation Bar ^[130].
2. Draw alternate "point pairs" in the Design Window. Each point in a "point pair" should be on the opposite side of the satin. A guideline will be created automatically connecting the "point pair" when it is drawn.
3. Double click in the Design Window, or select **Enter** from the right-click context menu to end drawing the "point pairs". Notice that 2 objects along the "point pairs" are created.
4. Input the In/Out points at the desired locations.
5. select **Enter** from the right-click context menu to generate the satin stitches.

Example



After drawing the "point pairs"



Satin output

5.12 OneTouch Auto-Digitizing

Refer to the following topics for details on how to use the OneTouch auto-digitizing feature:

- Import an Image for Auto-Digitizing ^[72]
- Auto-Digitize a Region ^[73]
- Auto-Digitize the Whole Image ^[73]
- Adjust Auto-Digitizing Default Settings ^[73]

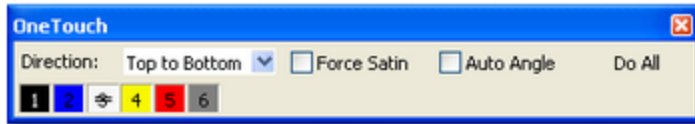
5.12.1 Import an Image for Auto-Digitizing

The Import Image dialog box will be opened automatically when you click the **OneTouch**  icon if there is no image loaded already. Refer to Import an Image ^[32] for details on how to import an image. If the image you are importing has too many colors than what OneTouch can handle, the program will invoke the **Reduce Image Color** function automatically (refer to Reduce Image Color ^[33] for more details).

5.12.2 Auto-Digitize a Region

Follow the steps below to auto-digitize a region:

1. Import an image (refer to Import an Image for Auto-Digitizing^[72] for more details).
2. Click on the **OneTouch**  icon from the OneTouch Toolbar^[146] on the Stitch Creation Bar^[130].
3. The OneTouch Bar^[147] will appear on the top of the program window, as shown below:



4. Fill stitches will be generate by default on large regions, check **Force Satin** if you want to produce satin stitches for the region instead.
5. Check **Auto Angle** if you want to generate fill stitches at an angle closely match the shape of the region. If this is not checked, fill stitches will be generated in the horizontal direction. (**Auto Angle** is neglected if **Force Satin** is checked.)
6. Click on a region where you want to put stitches on, the program will generate stitches automatically over the region. A region is defined as a 'connected' area of the same color. Note that the program treats colors on the OneTouch Bar^[147] with the same number as the same color, which essentially allows you to merge similar colors as a single color during auto-digitizing. Right-click on a color to change its color number. Also note that the program will change a system color to the color of the region automatically.
7. Repeat step 6 to digitize other regions.

5.12.3 Auto-Digitize the Whole Image

Follow the steps below to auto-digitize a region:

1. Import an image (refer to Import an Image for Auto-Digitizing^[72] for more details).
2. Click on the OneTouch icon  located on the Stitch Creation Bar^[130].
3. The OneTouch Bar^[147] will appear on the top of the program window.
4. Select a prefer stitching direction in **Direction**. For example, if you choose 'Top to Bottom', the first stitching color will be the first effective color from the top and so on for other colors.
5. Fill stitches will be generate by default on large regions, check **Force Satin** if you want to produce satin stitches instead.
6. Check **Auto Angle** if you want to generate fill stitches at an angle closely match the shapes of different regions. If this is not checked, fill stitches will be generated in the horizontal direction. (**Auto Angle** is neglected if **Force Satin** is checked.)
7. Click **Do All** to start generating stitches. The program will generate stitches automatically on all effective color regions. A region is defined as a 'connected' area of the same color. Note that the program treats colors on the OneTouch Bar^[147] with the same number as the same color, which essentially allows you to merge similar colors as a single color during auto-digitizing. Right-click on a color to change its color number or ignore the color for processing. Also note that the program will change system colors to the color of the regions automatically.
8. Right-click on a color on the image and select **Do One Color** will generate stitches on all regions in that color only. Note that **Do One Color** will be disable if you right-click on an ignored color.

5.12.4 Change Default Settings

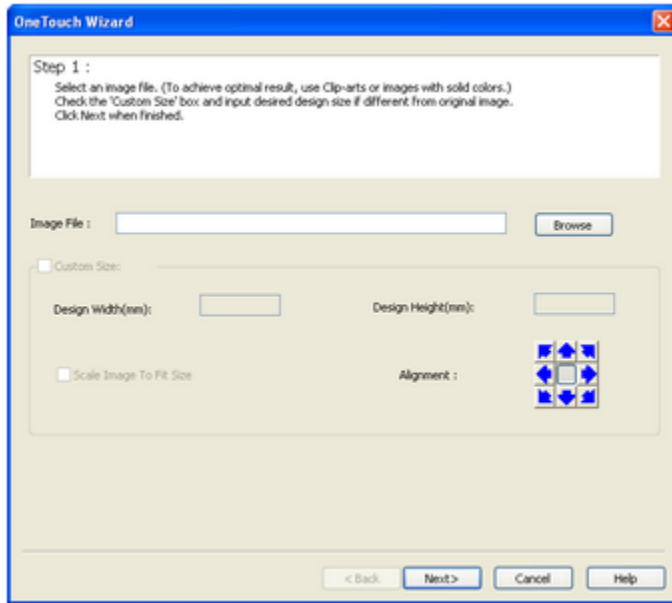
To change the default settings for OneTouch auto-digitizing, select **Settings Manager** from the Tools Menu^[113]. Default settings for OneTouch are found in the **Fill** and **Satin** tabs.

- Fill Stitch Default Settings^[78]
- Satin Stitch Default Settings^[79]

5.12.5 Using the OneTouch Wizard

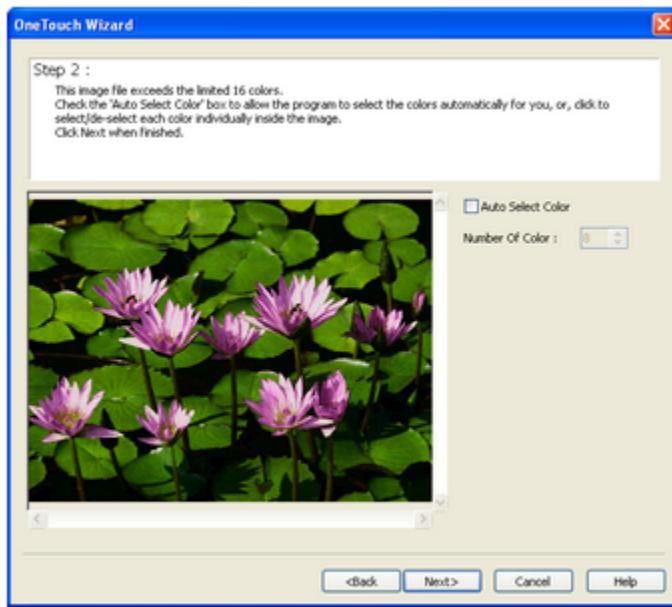
The OneTouch Wizard will guide you step by step to use the OneTouch auto-digitizing function. To use, follow the steps below:

1. Select **OneTouch Wizard** from the Tools Menu ^[113].
2. Step 1 of the OneTouch Wizard will be shown as below:



Input the full path name of the image for OneTouch in **Image File**. Click **Browse** to locate the file if necessary. Check **Custom Size** and input the desired design size if different from the original image. Check **Scale Image to Fit Size** to scale the image to fit the new design size if necessary. If leave unchecked, borders will be added if new design size is larger than original size or the image will be truncated if smaller. Select a location to place the image in **Alignment**, effective only when new design size is larger than original size. Click **Next** to continue.

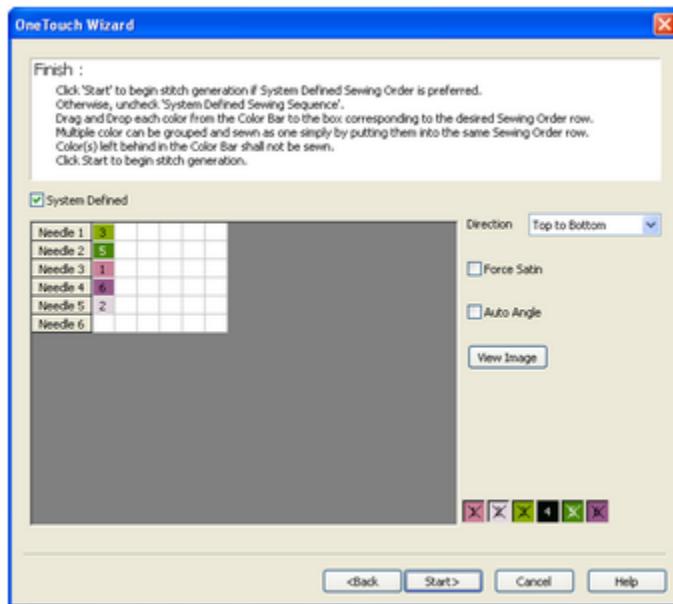
3. If the number of colors in the image file is more than 16, Step 2 of the OneTouch Wizard will be shown as below, allowing you to reduce the number of colors:



Check **Auto Select Color** to allow the program to select the colors automatically for you and the desire number of colors in **Number of Color**. Alternatively you can select the colors manually by click on the image. A new color box will be displayed on the

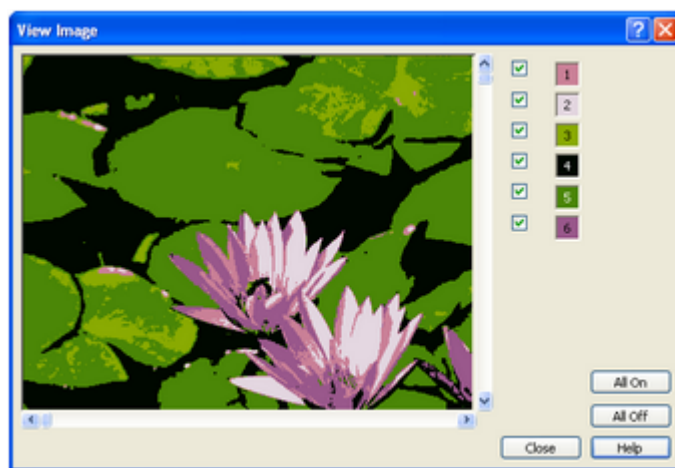
right each time a color is added. To de-select a color, click on the selected point on the image, or select **De-select Color** from the right-click menu on the color boxes. Click **Next** to continue.

4. Step 3 of the OneTouch Wizard will be shown as below:



The program will automatically assigned a sewing needle to each color and select the 'Background Color' also (background color will not be assigned a needle). To select you own sewing sequence, uncheck **System Defined** and drag and drop each color from the Color Bar at the lower right to a Sewing Order (Needle) row. Colors in the same row will be sewn using the same needle. Color(s) left behind in the Color Bar will be treated as 'Background Color(s)' and will not be sewn.

- Select a prefer stitching direction in **Direction**. For example, if you choose 'Top to Bottom', the first stitching color will be the first effective color from the top and so on for other colors.
- Fill stitches will be generate by default on large regions, check **Force Satin** if you want to produce satin stitches instead.
- Check **Auto Angle** if you want to generate fill stitches at an angle closely match the shapes of different regions. If this is not checked, fill stitches will be generated in the horizontal direction. (**Auto Angle** is neglected if **Force Satin** is checked.)
- Click **View Image** to if you need to examine the image, the following dialog box will be shown:



Select the zoom level from the right-click menu on the image. Show/Hide a color by checking/unchecking the box besides it. Click **All On** to show all colors and **All Off** to hide all colors. Click **Start** to start processing.

5.13 Settings Manager

Select **Settings Manager** from the Tools Menu ¹¹³ to open the Default Settings dialog box, as shown below:



- The **Preview Stitch Type** pull down menu will be enabled if stitch types are available for preview. To use, select the stitch type you want to preview from the pull down menu and then click **Show Preview**. The Setting Preview window will be opened.
- To open existing settings files, select from the pull down menu on the lower left corner. The 'Default' settings file is created by the program. You can modify any settings and click **Save** to save the file. Note that clicking **OK** will NOT save the settings to the file, it will just allow you to use the settings at the current instance of the program. If you exit and restart the program the settings will be returned to the values saved in the file.
- You can add as many settings files as you like. To do so, input a new name in the pull down menu and then click **Save**. The current default settings will be saved in a settings file with the new name.
- Click **Reset** to restore the system defined default settings into the current settings file.

5.13.1 General Default Settings



General



Maximum Stitch Length

Maximum stitch length in mm. Stitches will be cut automatically with jump stitches if longer than this length during punch output.



Minimum Stitch Length

Minimum stitch length in mm. Stitches will be removed automatically if shorter than this length during punch output.

Manual Stitch



Manual Stitch Length

Distance between manual stitch points in mm.



Jump Stitch Length

Distance between jump stitch points in mm.

Fill Font Character



Character Width

Width of character in percentage of the width proportional to the character height.



Character Height

Height of characters in mm. Typically this gives the height of the capital letter 'A'.



Character Space

Space between characters in mm.



Line Space

Space between lines in mm.

Satin Font Character



Character Width

Width of character in percentage of the width proportional to the character height.



Character Height

Height of characters in mm. Typically this gives the height of the capital letter 'A'.

**Character Space**

Space between characters in mm.

**Line Space**

Space between lines in mm.

5.13.2 Fill Stitch Default Settings**Top Stitches****Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Angle**

Angle of stitch lines.

**Cycle**

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.

**Fill Offset**

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.

External Compensation Mode ¹⁴³**External Compensation Value by Percentage**

External compensation value in percentage.

**External Compensation Value by (mm)**

External compensation value in mm.

**Internal Compensation**

Reserved for future.

**Maximum Span**

Fill density will vary from Span to Maximum Span, in mm.

**Minimum Jag Percentage**

Defines the minimum percentage of the width of the stitch block to which the program will randomly bring edge stitches.



Maximum Jag Percentage

Defines the maximum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

Underlay



Fill Underlay Pattern ^[143]



Underlay Length

Space between underlay stitch points in mm.



Underlay Span

Defines the density of underlay stitches, measured by the space between threads in mm.



Underlay Gap

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

5.13.3 Satin Stitch Default Settings



Top Stitches



Length

Distance between top stitch points in mm.



Span

Defines the density of the top stitches, measured by the space between threads in mm.



Cycle

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.



Fill Offset

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.



External Compensation Mode ^[143]



External Compensation Value by Percentage

External compensation value in percentage.

**External Compensation Value by (mm)**

External compensation value in mm.

**Internal Compensation**

Reserved for future.

**Width**

Width of single line satin stitch in mm.

**Satin Offset**

Offset of the satin column from the center in percentage of total width.

**Minimum Jag Percentage**

Defines the minimum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

**Maximum Jag Percentage**

Defines the maximum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

**Corner Compensation**

Use with Corner Type 2 to set the amount of overlapping at corners.

**Highest Density Width**

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

**Maximum Span**

Maximum (lightest) density. When auto-span is turned on, the program will automatically varies stitch density between the Span and Maximum Span value as a function of the width across the satin column at any given point. The narrower the column, the lighter the density.

**Minimum Span**

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

Underlay

Satin Underlay Pattern ¹⁴²

**Underlay Length**

Space between underlay stitch points in mm.

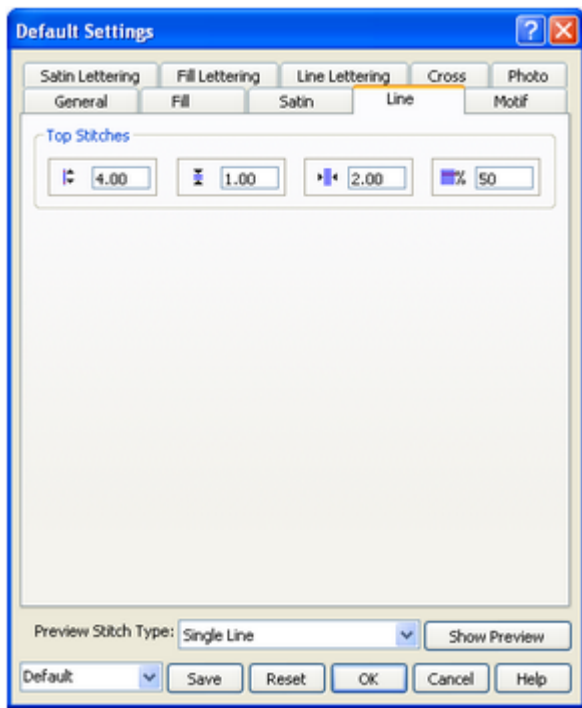
**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

5.13.4 Line Stitch Default Settings



Top Stitches

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

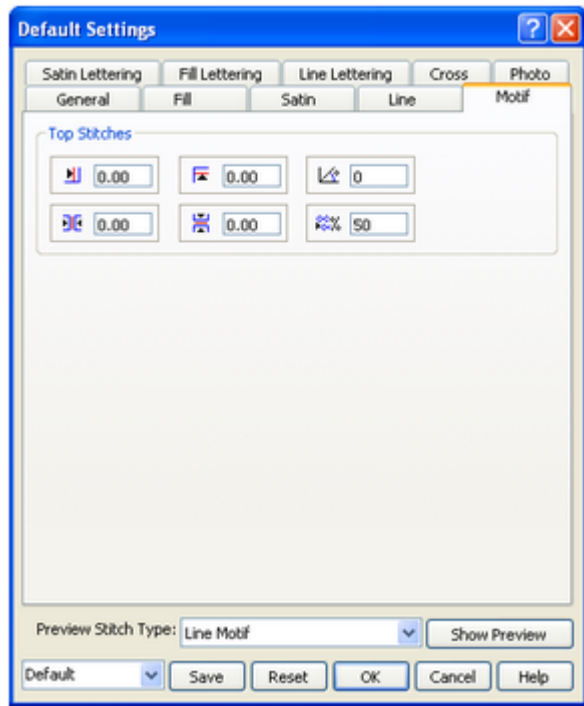
**Width**

Width of single line satin stitch in mm.

**Satin Offset**

Offset of the satin column from the center in percentage of total width.

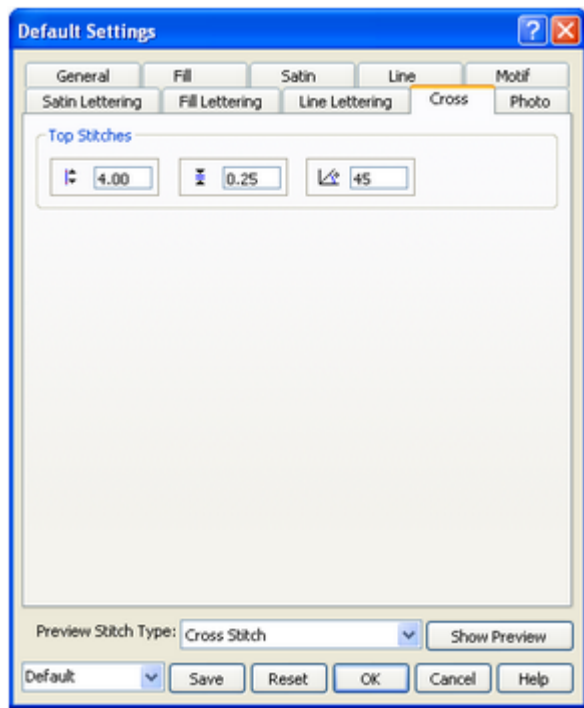
5.13.5 Motif Stitch Default Settings



Top Stitches

-  **Parallel Offset**
Adjust this to shift motifs in the direction of a motif line.
-  **Perpendicular Offset**
Adjust this to shift motifs in the direction perpendicular to the motif line.
-  **Motif Gap**
Distance between motifs in mm.
-  **Perpendicular Gap**
Perpendicular distance between motif lines in mm.
-  **Angle**
Angle of stitch lines.
-  **Displacement**
Motifs are shifted by percentage of the width of a motif from the previous row.

5.13.6 Cross Stitch Default Settings

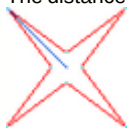


Top Stitches



Cross Stitch Length

The distance in mm of the cross stitch pattern shown in blue below:



Cross Stitch Span

The distance in mm of the cross stitch pattern shown in blue below:



Cross Stitch Angle

Angle of the cross stitch pattern, as show below:



0 degree



45 degree

5.13.7 Photo Stitch Default Settings



Top Stitches

-  **Maximum Stitch Length**
Maximum stitch length in mm.
-  **Minimum Stitch Length**
Minimum stitch length in mm.
-  **Span**
Defines the density of the top stitches, measured by the space between threads in mm.
-  **X-Gap**
Space between columns in mm.
-  **Y-Gap**
Space between rows in mm.

5.13.8 Satin Lettering Default Settings



Top Stitches Settings:

-  **Length**
Distance between top stitch points in mm.
-  **Span**
Defines the density of the top stitches, measured by the space between threads in mm.
-  **External Compensation Mode** ^[143]
-  **External Compensation Value by Percentage**
External compensation value in percentage.
-  **External Compensation Value by (mm)**
External compensation value in mm.
-  **Corner Compensation**
Use with Corner Type 2 to set the amount of overlapping at corners.
-  **Highest Density Width**
When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).
-  **Maximum Span**
Maximum (lightest) density. When auto-span is turned on, the program will automatically varies stitch density between the Span and Maximum Span value as a function of the width across the satin column at any given point. The narrower the column, the lighter the density.
-  **Minimum Span**
When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

Underlay Settings:

-  **Satin Underlay Pattern** ^[142]
-  **Underlay Length**
Space between underlay stitch points in mm.

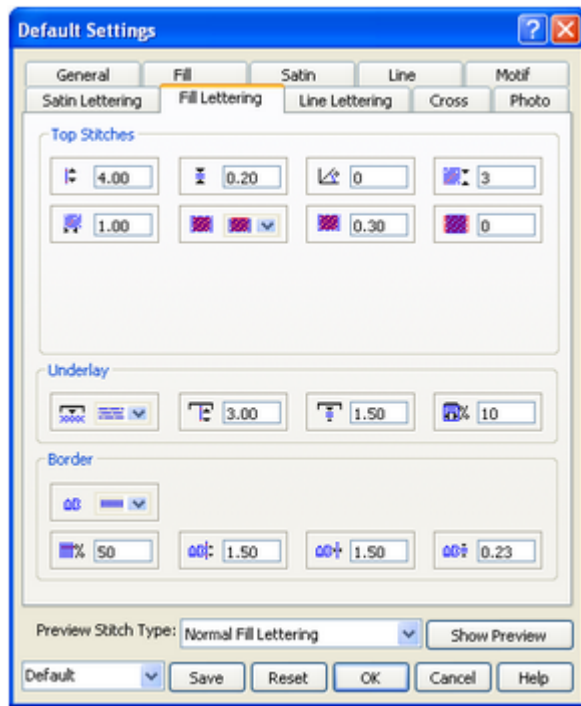
**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

5.13.9 Fill Lettering Default Settings



Top Stitches Settings:

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Angle**

Angle of stitch lines.

**Cycle**

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.

**Fill Offset**

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.



External Compensation Mode ^[143]

**External Compensation Value by Percentage**

External compensation value in percentage.

**External Compensation Value by (mm)**

External compensation value in mm.

**Internal Compensation**

Reserved for future.

Underlay Settings:



Fill Underlay Pattern ^[143]

**Underlay Length**

Space between underlay stitch points in mm.

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

Border Settings:**Border Type****Satin Offset**

Offset of the satin column from the center in percentage of total width.

**Border Length**

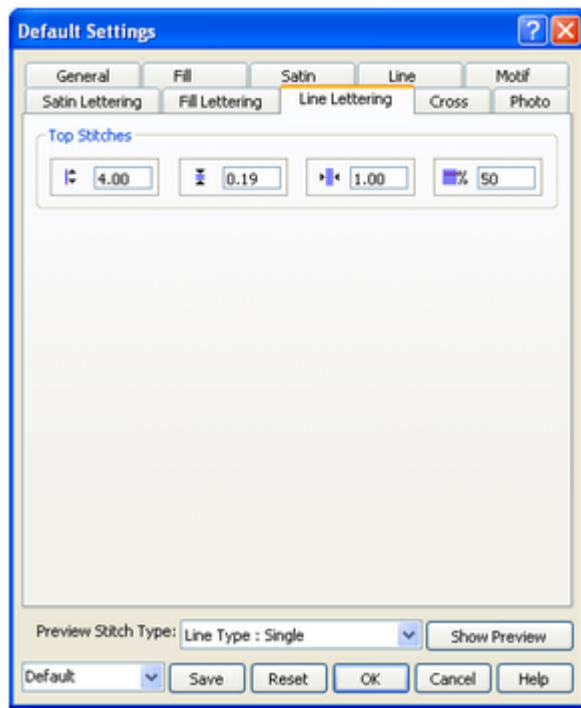
Length of border stitches in mm.

**Border Width**

Width of the border stitches in mm.

**Border Span**

Span (density) of border stitches in mm.

5.13.10 Line Lettering Default Settings**Top Stitches****Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Width**

Width of single line satin stitch in mm.

**Satin Offset**

Offset of the satin column from the center in percentage of total width.

5.14 Pattern Manager

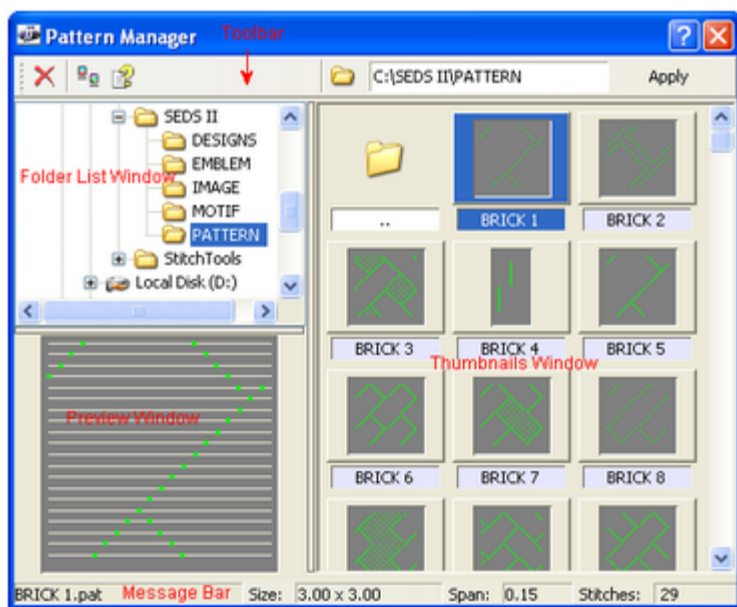
Patterns are used in various stitch types like, Pattern Fill, Pattern Fill Satin and Pattern Fill Lettering. The program comes with a pre-defined set of patterns and you can add your own patterns easily (see [Create a New Pattern](#) ⁸⁹ for more details). Once a pattern is selected as the default pattern, it will remain be selected throughout even after the program is closed.

- Select a Pattern ⁸⁸
- Delete a Pattern ⁸⁸
- Create a New Pattern ⁸⁹
- Edit Existing Patterns ⁹⁰

5.14.1 Select a Pattern

Follow the steps below to select a pattern:

1. Select **Pattern Manager** from the Tools Menu ¹¹³. The Pattern Browser ¹⁶⁵ will be displayed as below:

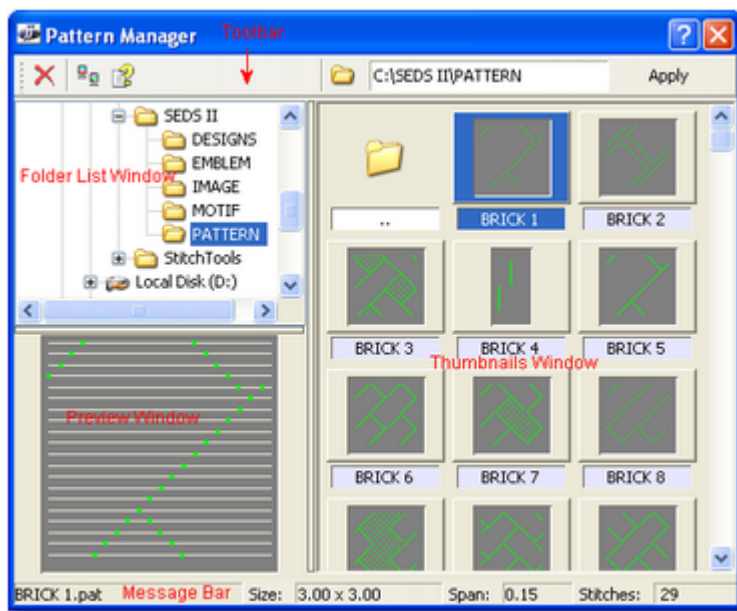


2. Select the folder containing the pattern from the **Folder List Window**.
3. Click on the desired pattern in the **Thumbnail Window**, it will be highlighted and a scaled view will be displayed in the **Preview Window**.
4. Click the **Apply** button or select **Apply** from the right-click context menu to select the pattern as the default pattern.
5. You can choose to close the Pattern Browser ¹⁶⁵ or leave it opened and continue to work in the Program Window.

5.14.2 Delete a Pattern

Follow the steps below to delete a pattern:

1. Select **Pattern Manager** from the Tools Menu ¹¹³. The Pattern Browser ¹⁶⁵ will be displayed as below:

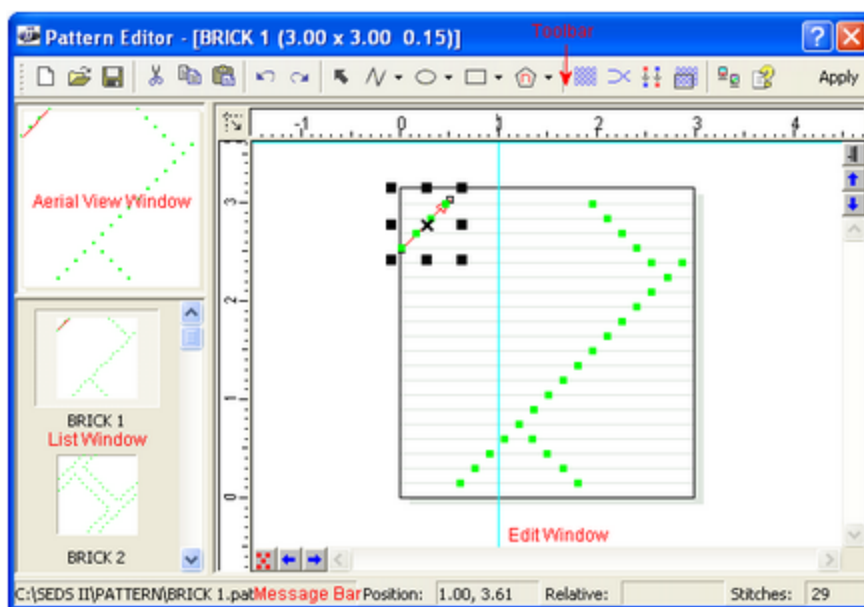


2. Select the folder containing the pattern from the **Folder List Window**.
3. Click on the desired pattern in the **Thumbnail Window**, it will be highlighted and a scaled view will be displayed in the **Preview Window**.
4. Click the  icon on the **Toolbar**, or select **Delete** from the right-click context menu to delete the pattern.
5. You can choose to close the Pattern Browser ^[165] or leave it opened and continue to work in the Program Window.

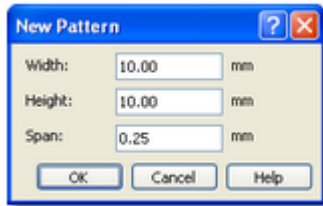
5.14.3 Create a New Pattern

Follow the steps below to create a pattern:

1. Select **Pattern Manager** from the Tools Menu ^[113]. The Pattern Browser ^[165] will be displayed.
2. Click the  will close the Pattern Browser ^[165] and open the Pattern Editor ^[166], as shown below:



3. Click the **New**  icon to create a new pattern. The New Pattern dialog box will be shown as below:



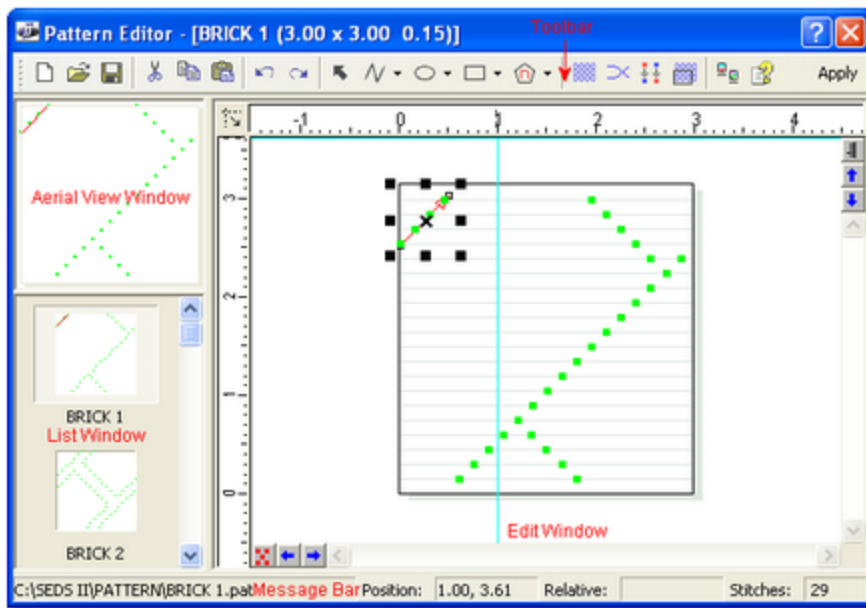
Input the desired **Width**, **Height** and **Span** of the pattern and then click **OK**. A blank pattern will be created.

4. Follow the steps in Edit Existing Patterns [\[90\]](#) to edit and save the new pattern.

5.14.4 Edit Existing Patterns

Follow the steps below to edit an existing pattern:

1. Select **Pattern Manager** from the Tools Menu [\[113\]](#). The Pattern Browser [\[165\]](#) will be displayed.
2. Click the  will close the Pattern Browser [\[165\]](#) and open the Pattern Editor [\[166\]](#), as shown below:



3. Click the **Open**  icon to select the folder when the pattern is located.
4. Select the pattern from the List Window by clicking on the thumbnail. The pattern will be opened and displayed in the Edit Window.
5. To zoom in/out, draw a rectangle in the Aerial View Window for the area to zoom, or select the appropriate function from the right-click context menu in the Edit Window.
6. To manually add/delete stitch points to/from the pattern, select the **Add/Delete Point**  icon. Click on a line with no point there will add a point at that location, otherwise the point will be delete.
7. You can also generate points from objects. To do so, first create the relevant objects using the object drawing tools. This process is similar to the object creations in the Design Window (see Create an Object [\[36\]](#) for more details). Click the **Select**  icon and select the objects desired. The process is similar to the objects selection in the Design Window (see Select Object(s) [\[14\]](#) for more details). Click the **Generate Points**  icon. Points will be created at the intersections of the objects and the horizontal lines.
8. To move points, select the  icon. Select a single point by clicking on it or multiple points by drawing a rectangle in the Edit

Window. The points within the rectangle will be all selected. Selected points will be highlighted in blue color. To move, drag on one of the selected points and move to the desired location.

9. To shift the whole pattern, select the **Shift**  icon. Click on a location in the Edit Window and the whole pattern will be shifted with that location moved to the lower left corner. You can also click the shift icons, , ,  or  to shift the whole pattern in the desired direction.
10. To clear all points in the pattern, select **Clear All Points** from the right-click context menu in the Edit Window.
11. To get a feel of how the pattern will look like in a fill stitch, click on the **Tile Display**  icon in the Edit Window. The pattern will be tiled to fit the Edit Window.
12. You can use the **Undo**  and **Redo**  button to undo or redo changes made.
13. Click the **Save**  to save the pattern. The Save As dialog box will be opened. Select the folder you want the pattern to be saved in and input the name for it. Note that the pattern file will have a ".pat" extension. Click **Save** to save the pattern. Note that you MUST have at least one point on each horizontal line (highlighted in gray color), otherwise the pattern will not work.

5.15 Motif Manager

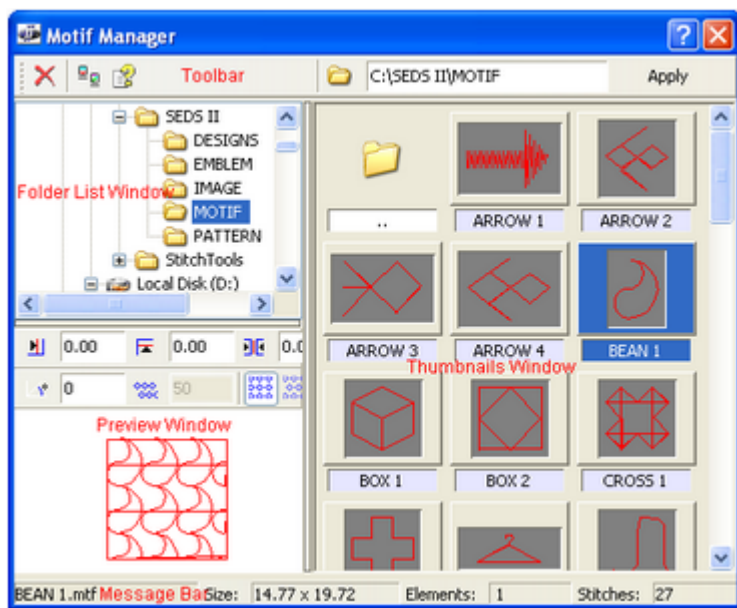
Motifs are used in various stitch types like, Line Motif, Fill Motif and Fill Motif Lettering. The program comes with a pre-defined set of motifs and you can add your own motifs easily (see Create a New Motif ⁹² for more details). Once a motif is selected as the default motif, it will remain be selected throughout even after the program is closed.

- Select a Motif ⁹¹
- Delete a Motif ⁹²
- Create a New Motif ⁹²
- Edit Existing Motifs ⁹³

5.15.1 Select a Motif

Follow the steps below to select a motif:

1. Select **Motif Manager** from the Tools Menu ¹¹³. The Motif Browser ¹⁶⁷ will be displayed as below:



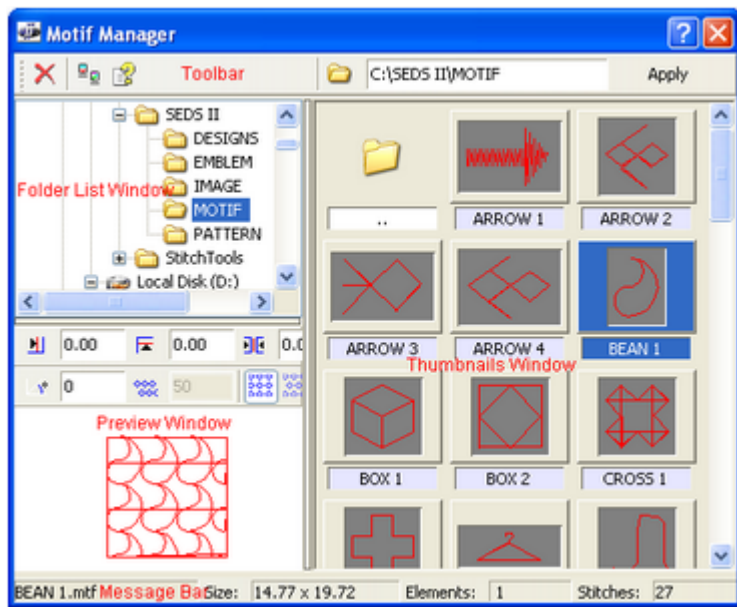
2. Select the folder containing the motif from the **Folder List Window**.
3. Click on the desired motif in the **Thumbnail Window**, it will be highlighted and a scaled view will be displayed in the **Preview Window**.

4. Click the **Apply** button or select **Apply** from the right-click context menu to select the motif as the default motif.
5. You can choose to close the Motif Browser^[167] or leave it opened and continue to work in the Program Window.

5.15.2 Delete a Motif

Follow the steps below to delete a motif:

1. Select **Motif Manager** from the Tools Menu^[113]. The Motif Browser^[167] will be displayed as below:

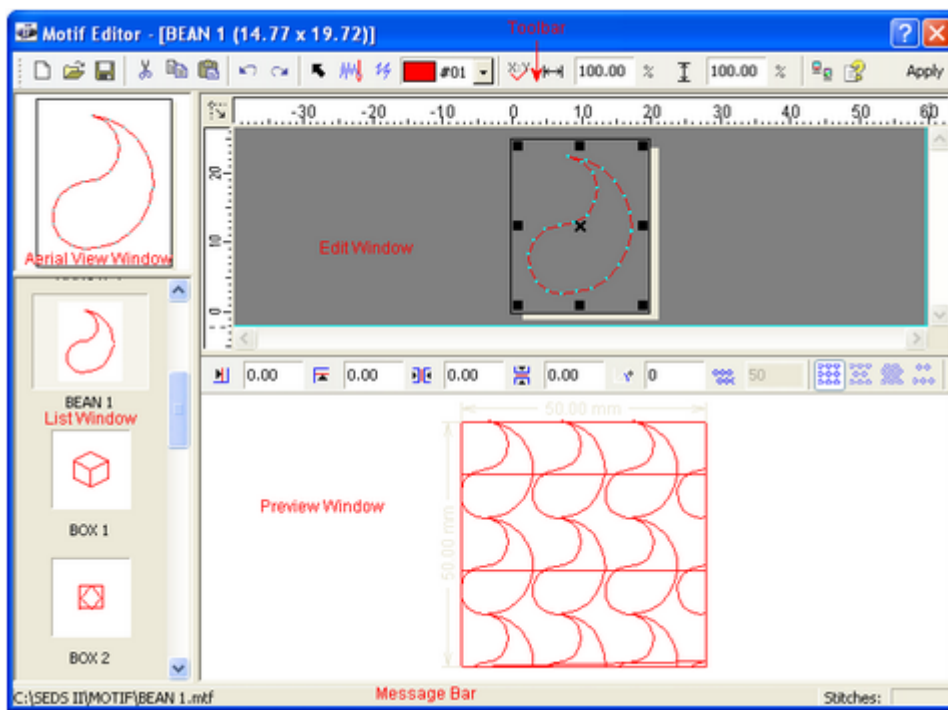


2. Select the folder containing the motif from the **Folder List Window**.
3. Click on the desired motif in the **Thumbnail Window**, it will be highlighted and a scaled view will be displayed in the **Preview Window**.
4. Click the  icon on the **Toolbar**, or select **Delete** from the right-click context menu to delete the motif.
5. You can choose to close the Motif Browser^[167] or leave it opened and continue to work in the Program Window.

5.15.3 Create a New Motif

Follow the steps below to create a motif:

1. Select **Motif Manager** from the Tools Menu^[113]. The Motif Browser^[167] will be displayed.
2. Click the  will close the Motif Browser^[167] and open the Motif Editor^[169], as shown below:



3. Click the  icon to create a new motif. The New Motif dialog box will be shown as below:



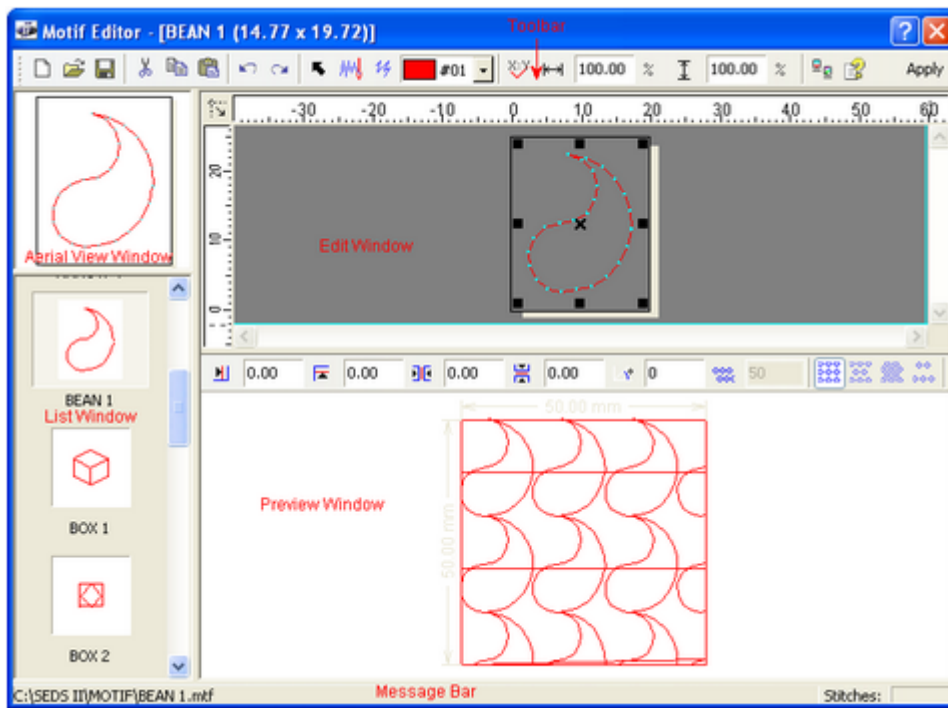
Input the desired **Width** and **Height** of the new motif and then click **OK**. A blank motif will be created.

4. Follow the steps in Edit Existing Motifs [93](#) to edit and save the new motif.

5.15.4 Edit Existing Motifs

Follow the steps below to edit an existing motif:

1. Select **Motif Manager** from the Tools Menu [113](#). The Motif Browser [167](#) will be displayed.
2. Click the  will close the Motif Browser [167](#) and open the Motif Editor [169](#), as shown below:



3. Click the **Open**  icon to select the folder when the motif is located.
4. Select the motif from the List Window by clicking on the thumbnail. The motif will be opened and displayed in the Edit Window.
5. To zoom in/out, draw a rectangle in the Aerial View Window for the area to zoom, or select the appropriate function from the right-click context menu in the Edit Window.
6. To add stitch blocks to the motif, select the **Add Stitch Blocks**  icon. Select a color for stitch block from the **Color List**. Create the stitch block in the Edit Window using manual stitches.
7. To edit stitch blocks, click the **Select**  icon and select the stitch blocks desired (this process is similar to selecting stitch blocks in the Design Window, see Select Stitch Block(s) ¹⁴⁷ for more details).
 - To change size, input the new values in **Width** and **Height**. Push the  down if you want to maintain the original aspect ratio when changing the values of width or height. Click **Unit** to switch between absolute (mm) or relative (%) mode. In absolute mode the values in **Width** and **Height** will be defined in mm, while in relative mode, the values will be defined in percentage of the original value.
 - To change color, select the desired color in the **Color List** and the select **Change Color** from the right-click context menu in the Edit Window.
 - To mirror, select **X Mirror** or **Y Mirror** from the right-click context menu in the Edit Window. **X Mirror** will mirror the blocks in the horizontal direction while **Y Mirror** will mirror them in the vertical direction.
8. To edit points in a stitch block, click the **Select**  icon and select the stitch block. Then click the **Edit Points**  icon will highlight the selected block. Select the points you want to edit (this process is similar to selecting points in Stitch Point(s) Editing and see Select Stitch Point(s) ¹⁰³ for more details). Selected points will be highlighted in purple color.
 - To move, drag on one of the selected points and move to the desired location.
 - To insert points, select a single point and then select **Insert Stitches** from the right-click context menu in the Edit Window and draw the points as needed.
 - To remove, select **Remove** from the right-click context menu in the Edit Window.
 - To split, select a single point and then select **Separate Stitches** from the right-click context menu in the Edit Window. The stitch block will be split into 2 at the position of the selected point.
9. The Preview Window shows how it will look to have the motif filled in a rectangle. Click **Change Preview Size**  icon and input the desired width of height of the filled rectangle. Adjust other settings for different results (see Fill Motif ⁵⁷ for more details).
10. You can use the **Undo**  and **Redo**  button to undo or redo changes made.

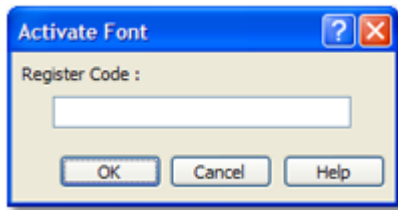
11. Click the **Save**  to save the motif. The Save As dialog box will be opened. Select the folder you want the motif to be saved in and input the name for it. Note that the motif file will have a ".mtf" extension. Click **Save** to save the motif.

5.16 Font Management

5.16.1 Activate Font(s)

You can use a limited number of pre-digitized fonts and you can purchase additional fonts when needed. To order fonts, visit our website or email us. After an order is completed, we will send you activation code(s) through email and following the steps below to activate fonts:

1. Select **Activate Font** from the Help Menu  and the Activate Font dialog box will be displayed as shown below:



2. Input the activation code you received from us into the blank space.
3. Click **Register** when finished. A confirm message will be shown if successful.
4. Repeat 2 & 3 for all the codes.

6 Designs Editing

6.1 Change Canvas of a Design

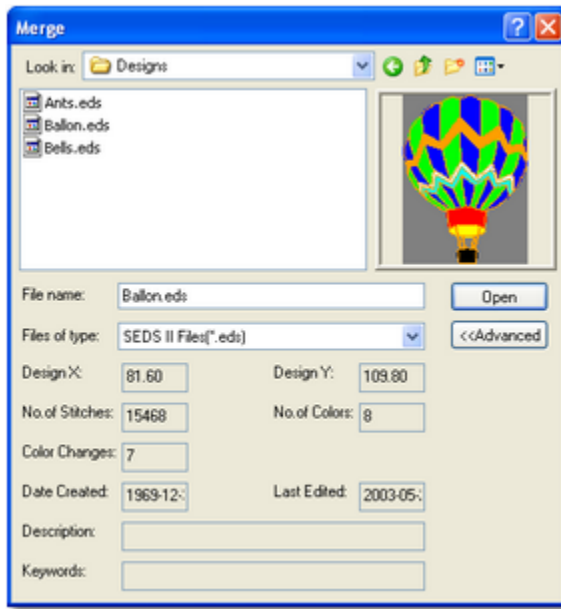
Sometimes you may require to add more empty space in a design, e.g. when you are merging designs. To do so, follow the steps below:

1. Open a design file (refer to Open a Design  for more details).
2. Select **Properties** from the Edit Menu  and the Design Properties dialog box will be displayed (refer to Design Properties  for more details).
3. Check **Proportionate** if you want to maintain the original aspect ratio for the new file size.
4. Input a new file width in **X-(mm)** or **X-(inch)** if desired. Note that you just need to input one of the them only, the value of the other will be calculated automatically.
5. Input a new file height in **Y-(mm)** or **Y-(inch)** if desired. Note that you just need to input one of the them only, the value of the other will be calculated automatically.
6. Check **Canvas**.
7. Click **OK** and the file size of the design will be changed accordingly with the original contents placed at the center of the new file area.

6.2 Merge Designs

The steps below shows how to merge 2 designs and can be applied to merging multiple designs:

1. Open one of the design files (refer to Open a Design  for more details), usually the larger of the 2 if not same size.
2. Change the canvas of the opened file if necessary to accommodate the size of the second design file (refer to Change Canvas of a Design  for more details).
3. Select **Merge** from the File Menu  and the Merge Design dialog box will be shown as below:



4. Select the file to be merged and click **Open** to starting merging.
5. Note that the new design will be placed at the center of the original design.

6.3 Stitch Block(s) Editing

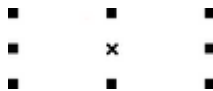
Operations on stitch blocks, like move, resize, rotate, copy, delete, mirror etc are very similar to the corresponding operations for objects except you need to select the stitch blocks (refer to Select Stitch Block(s) ^[14] for more details) first instead of stitch blocks. Refer to the following for more details:

- Move/Resize Stitch Block(s) ^[96]
- Rotate Stitch Block(s) ^[97]
- Mirror Stitch Block(s) ^[98]
- Copy Stitch Block(s) ^[98]
- Delete Stitch Block(s) ^[98]
- Change Stitching Sequence ^[98]
- Change Stitch Block(s) Color ^[99]
- Edit Stitch Block(s) ^[99]
- Stitch Editor

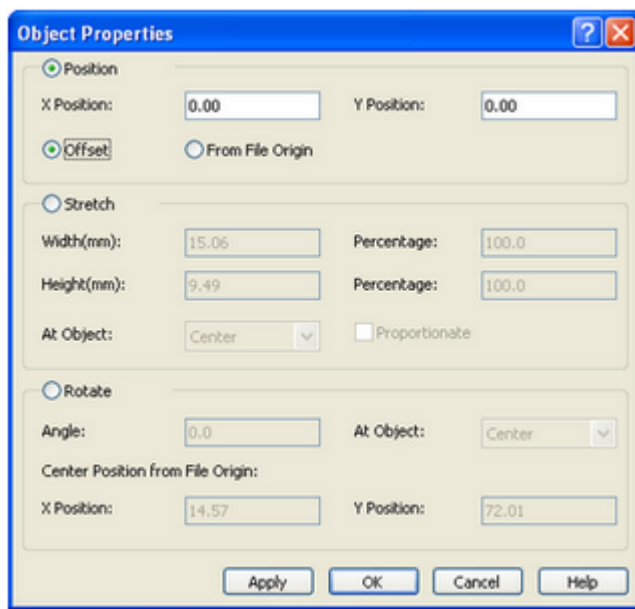
6.3.1 Move/Resize Stitch Block(s)

Follow the steps below to move or resize stitch block(s):

1. Select the stitch block(s) you want to move/resize (refer to Select Stitch Block(s) ^[14] for more details).
2. The 9 move/resize control nodes shown below will be displayed at the boundary rectangle of the stitch block(s).



3. To resize the stitch block(s), hold down the mouse button on one of the 'square' control node. Drag the mouse and the stitch block(s) will be re-sized in the direction corresponding to the position of the control node, e.g. if the bottom-right control node is used, the block(s) will be re-sized in the bottom-right direction. Release the mouse button to end.
4. To move the stitch block(s), hold down the mouse button on the 'cross' control node at the center and drag the mouse to move the block(s). Release the mouse button to end.
5. Because of object-inheritance (see Object-Based Digitizing ^[187] for more details), you can also enter the exact size or position for the stitch blocks from the Object Properties dialog box, which can be opened by pressing F7 on the keyboard, or selecting **Object Properties** from the Edit Menu ^[110], as shown:



- To change position, select **Position** and input the values in **X Position** for horizontal displacement and **Y Position** for vertical displacement. The values entered will be relative to the original position if **Offset** is selected, or to the lower left corner of the file if **From File Origin** is selected.
- To change size, select **Stretch** and input the **Width** and/or **Height** in mm or as a percentage of the original values. Check **Proportionate** to maintain the original aspect ratio. You can also specify the Anchor Point of re-size (the point that doesn't move) in **At Object**.

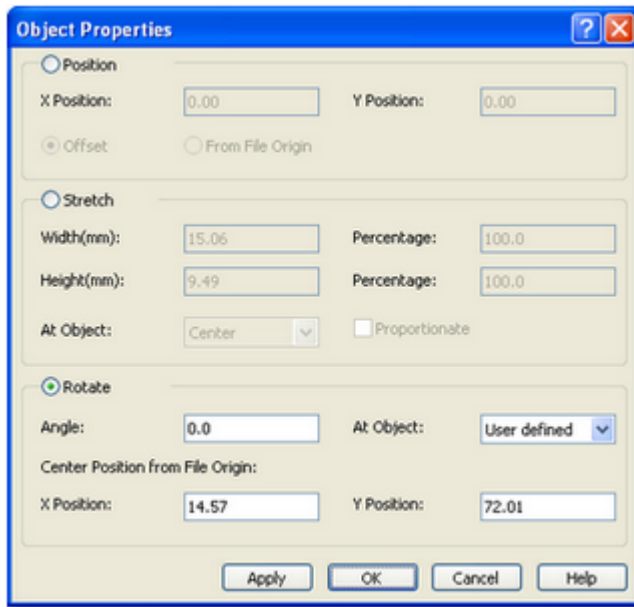
6.3.2 Rotate Stitch Block(s)

Follow the steps below to rotate stitch block(s):

1. Select the stitch block(s) you want to rotate (refer to Select Stitch Block(s) ^[14] for more details).
2. Click on the 'cross' control node at the center (refer to Move/Resize Stitch Block(s) ^[96] for more details).
3. The 9 move/resize control nodes will be change to the 5 rotate control nodes, as shown below:



4. The 'circle' control node at the center denotes the center of rotation. Hold down the mouse button on it and drag the mouse to change its position. Release the mouse button to end.
5. To rotate the stitch block(s), hold down the mouse button on one of the 'arc' control node at the corners and drag the mouse to rotate the block(s). Release the mouse button to end.
6. Because of object-inheritance (see Object-Based Digitizing ^[187] for more details), you can also enter the exact angle and/or the center of rotation from the Object Properties Dialog Box ^[176], which can be opened by pressing F7 on the keyboard, or selecting Object Properties from the Edit Menu ^[110], as shown:



- Select **Rotate** and input value in **Angle** for the rotation angle, and select the center of rotation from **At Object**. Note coordinates of the center of rotation relative to the lower left corner of the file will be shown in **X Position** and **Y Position**. If "User defined" is selected in **At Object**, you can input values in **X Position** and **Y Position** manually.

6.3.3 Mirror Stitch Block(s)

Follow the steps below to mirror stitch block(s):

1. Select the stitch block(s) you want to mirror (refer to Select Stitch Block(s) ^[14] for more details).
2. Select **X-Mirror** from the Edit Menu ^[11b] to mirror the block(s) in the horizontal direction.
3. Select **Y-Mirror** from the Edit Menu ^[11b] to mirror the block(s) in the vertical direction.

6.3.4 Copy Stitch Block(s)

Follow the steps below to copy stitch block(s):

1. Select the stitch block(s) you want to copy (refer to Select Stitch Block(s) ^[14] for more details).
2. Select **Copy** from the Edit Menu ^[11b], or press Ctrl-C on the keyboard.
3. Select **Paste** from the Edit Menu ^[11b], or press Ctrl-V on the keyboard.
4. Move the cursor to the position you want to place the copied block(s) and click in the Design Window to end.

6.3.5 Delete Stitch Block(s)

Follow the steps below to delete stitch block(s):

1. Select the stitch block(s) you want to delete (refer to Select Stitch Block(s) ^[14] for more details).
2. Select **Delete** from the Edit Menu ^[11b], or press the **DEL** on the keyboard will delete the block(s).
3. Alternatively, select **Cut** from the Edit Menu ^[11b], or press Ctrl-X on the keyboard will also delete the block(s) but in addition a copy of the block(s) will be placed in the clipboard.

6.3.6 Change Stitching Sequence

Refer to the topic Stitch Browser ^[99] on how to change stitch blocks sequence using the Stitch Browser.

6.3.7 Change Stitch Block(s) Color

Refer to the topic [Change Color](#) ^[19] on how to change stitch block(s) color in the Design Window or the topic [Stitch Browser](#) ^[99] on how to change stitch block(s) color in the Stitch Browser.

6.3.8 Insert/Remove Trim Code

Trim code will be added automatically during punch output if **Auto Lock Stitch with Trim**  is selected during stitch creation. You can also insert/remove trim codes at the end of stitch block as follows:

1. Select the **Insert/Remove Trim Code**  icon from the Machine Control Toolbar ^[146] on the Stitch Creation Bar ^[130].
2. Click on the stitch block you want to insert/remove trim code. If the stitch block already have a trim code it will be removed, otherwise it will be added.
3. You can check if a trim code exist in a stitch block from the [Stitch Browser](#) ^[99], or select **Display Stitches with Jump Lines** from the Design View submenu of the View Menu ^[111]. Jump lines will be shown in red color if there is a trim code, if not it will be shown in green.

6.3.9 Edit Stitch Block(s)

After a stitch block is created, you can change many of its properties, like settings, options, In/Out points and even stitch type, at ease using the **Edit Stitch Block(s)** function as described below:

1. Select the **Edit Stitch Block(s)**  icon from the Stitch Block Edit Toolbar ^[146] on the Primary Bar ^[114].
2. Click on a stitch block that you want to edit. The corresponding stitch type, settings, options and In/Out points of the block will be shown.
3. To change the In/Out points, click and drag on the points and move them to the desired location.
4. Change the settings and options on the corresponding settings bar and options bar as necessary.
5. You can change to another "compatible" stitch type by selecting the type on the setting bar. Stitch types that requires the same object type combination are compatible.
6. Select **Enter** from the right-click context menu to make the changes in effect.

6.3.10 Stitch Browser

You can use the Stitch Browser to perform many stitch block related functions, such as:

Select Stitch Block(s) ^[99]
 Hide/Show Stitch Block(s) ^[99]
 Re-sequence Stitch Blocks ^[99]
 Change Color of Stitch Block(s) ^[99]
 Insert/Remove Trim Codes of Stitch Block(s) ^[99]
 Edit Stitch Point(s) ^[99]
 Edit Stitch Block(s) ^[99]

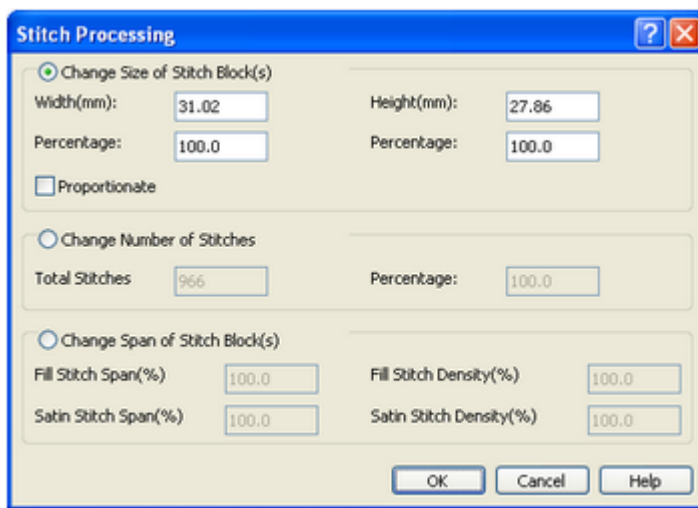
- To turn on/off the Stitch Browser Docking Pane, select **Stitch Browser** from the **Toolbars** submenu of the View Menu ^[111].
- Click on the Stitch Browser Docking Pane to open it. To have it stayed open push the  icon on the upper right corner. To resume auto hide click the  icon.
- Stitch blocks will be shown as thumbnails according to the display mode selected on the tabs on the top and right side. There are 3 numbers beneath each thumbnail. The one on the left is the ordinal number of the thumbnails. The one on the right is the ordinal number of the stitch block(s) in the design. The one in bracket is the total number of stitches in the stitch block(s).
 - **All Layers**
Display stitch blocks from all layers.
 - **Current Layer**
Display stitch blocks in current layer only.
 - **All**
Each stitch block is display in a separate thumbnail.
 - **Color Change**
Successive stitch blocks of the same color (needle) are displayed in a thumbnail.

- **Selected**
Display only selected stitch blocks, one in a separate thumbnail.
- **Manual**
Display only manual stitch blocks, one in a separate thumbnail.
- **Fill**
Display only fill stitch blocks, one in a separate thumbnail.
- **Satin**
Display only satin stitch blocks, one in a separate thumbnail.
- **Line**
Display only line stitch blocks, one in a separate thumbnail.
- To select a single thumbnail, just click on it. Thumbnails that are originally selected will be de-selected. By selecting a thumbnail all stitch blocks in it will be selected. The selected thumbnail will be highlighted with a blue rectangle around it.
- To select a group of adjacent thumbnails,
 - Click on the first thumbnail.
 - Hold down the SHIFT key.
 - With the SHIFT key still depressed, click on the last thumbnail in sequence you wish to select. All thumbnails between the two thumbnails you've clicked will be selected.
- To toggle selection/de-selection a thumbnail, hold down the CTRL key and click on a thumbnail. You can use this to select multiple thumbnails.
- To hide/show stitch blocks in a thumbnail, select **Show/Hide**   icon beneath the thumbnail. Note that if a thumbnail is hide it cannot be selected.
- To hide multiple thumbnails at the same time, select the thumbnails and select **Hide Selected** from the right-click context menu.
- To show all thumbnails, select **Show All** from the right-click context menu.
- To re-sequence thumbnails, thus the stitch block(s) they contain,
 - Select the thumbnails you want to re-sequence.
 - Click on one of the selected thumbnails and with the mouse button hold down.
 - Drag and move to a thumbnail that is not selected and release the button.
 - The selected thumbnails will be moved before that thumbnail.
- To change the color of all stitch blocks in a thumbnail,
 - Select the thumbnail.
 - Select **Change Color** from the right-click context menu.
 - Select the desired color from the submenu.
- To insert/remove trim code at the end of stitch blocks in a thumbnail, press the  button beneath the thumbnail down to insert trim codes and push it up to remove trim codes.
- To edit stitch points in the stitch blocks of a thumbnail, click the  icon beneath the thumbnail. The thumbnail will be selected automatically and the program will jump to the Stitch Point(s) Editing ^[103] function. If there are more than 1 stitch block in the thumbnail, the first block will be selected for operation.
- To edit the stitch blocks of a thumbnail, click the  icon beneath the thumbnail. The thumbnail will be selected automatically and the program will jump to the Edit Stitch Block(s) ^[99] function. If there are more than 1 stitch block in the thumbnail, the first block will be selected for operation.

6.4 Stitch Block(s) Processing

Follow the steps below to process stitch block(s):

1. Select the stitch block(s) you want to process (refer to Select Stitch Block(s) ^[14] for more details). To process the whole design, select all stitch blocks.
2. Click on the  in the Primary Bar ^[114].
3. The Stitch Processing Dialog Box ^[17] will be shown below:

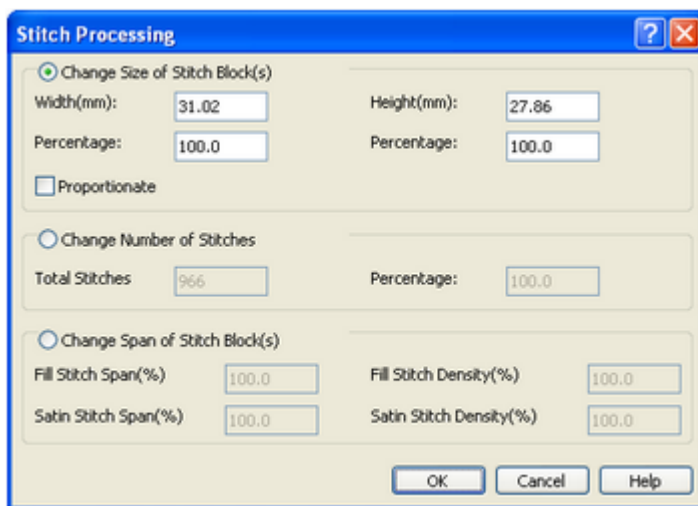


4. To change the size of the stitch block(s), select **Change Size of Stitch Block(s)** and input the desired width and/or height in mm or by percentage. Check **Proportionate** to maintain the aspect ratio of the stitch block(s).
5. To change the number of stitches of the stitch block(s), select **Change Number of Stitches** and input the desired stitch number in **Total Stitches**, or a percentage of the current number of stitches in **Percentage**.
6. To change the span(density) of the stitch block(s), select **Change Span of Stitch Block(s)** and input the desired span or density for fill and satin stitch blocks.
7. Click **OK** to start processing.

6.4.1 Change Size

To change the size of stitch block(s):

1. Select the stitch block(s) you want to resize (refer to Select Stitch Block(s) ¹⁴¹ for more details). To resize the whole design, select all stitch blocks.
2. Select the **Stitch Processing**  icon from the Stitch Block Edit Toolbar ¹⁴⁶ on the Primary Bar ¹¹⁴.
3. The Stitch Processing Dialog Box ¹⁷⁷ will be shown below:

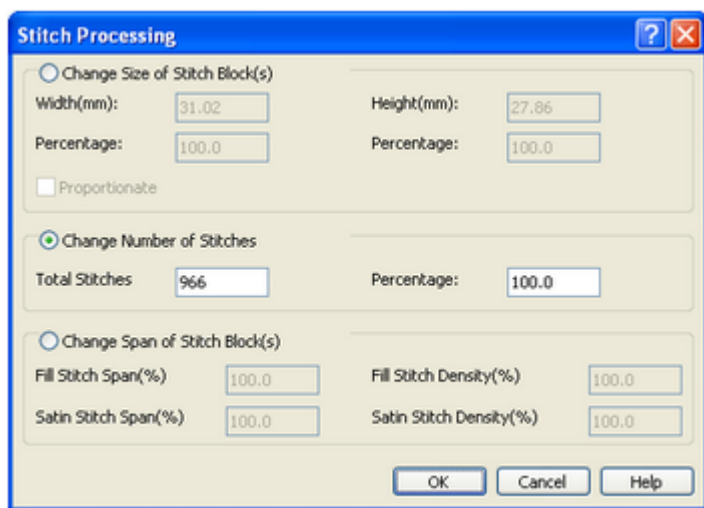


4. Select **Change Size of Stitch Block(s)** and input the desired width and/or height in mm or by percentage. Check **Proportionate** to maintain the aspect ratio of the stitch block(s).
5. Click **OK** to start processing.
6. Note that the program will automatically adjust add or remove stitches during re-sizing to preserve the original density.

6.4.2 Change Number of Stitches

To change the number of stitches in stitch block(s):

1. Select the stitch block(s) you want to process (refer to Select Stitch Block(s) ¹⁴¹ for more details). To process the whole design, select all stitch blocks.
2. Select the **Stitch Processing**  icon from the Stitch Block Edit Toolbar ¹⁴⁶ on the Primary Bar ¹¹⁴.
3. The Stitch Processing Dialog Box ¹⁷⁷ will be shown below:

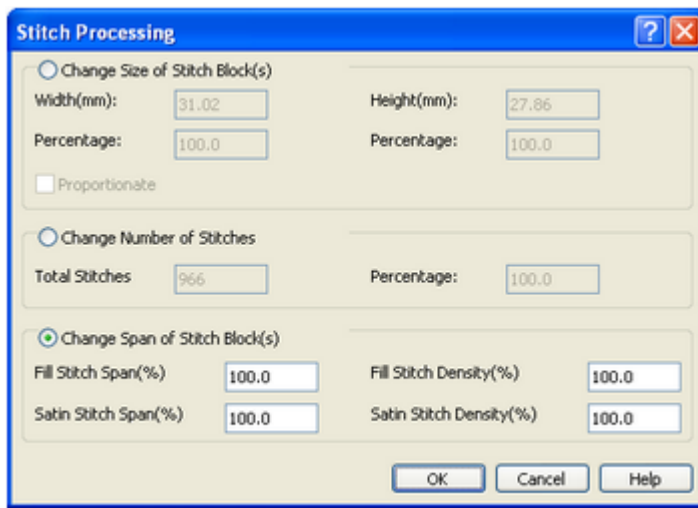


4. Select **Change Number of Stitches** and input the desired stitch number in **Total Stitches**, or a percentage of the current number of stitches in **Percentage**.
5. Click **OK** to start processing.
6. Note that the program will adjust the density of the stitch blocks during the process.

6.4.3 Change Density (Span)

To change the density(span) of stitch block(s):

1. Select the stitch block(s) you want to process (refer to Select Stitch Block(s) ¹⁴¹ for more details). To process the whole design, select all stitch blocks.
2. Select the **Stitch Processing**  icon from the Stitch Block Edit Toolbar ¹⁴⁶ on the Primary Bar ¹¹⁴.
3. The Stitch Processing Dialog Box ¹⁷⁷ will be shown below:



4. Select **Change Span of Stitch Block(s)** and input the desire percentage of the original span or density for fill and satin stitch blocks.
5. Click **OK** to start processing.
6. Note that the program will adjust the number of stitches during the process.

6.4.4 Convert Manual Stitch Block

When design files, like DST, MELCO EXP, are imported to the program, all stitch blocks are stored as Manual Stitch Type. To convert the manual stitch blocks to the program's internal stitch type, like Fill and Satin, do the following:

1. Split the stitch block(s) at locations where stitches running from one area to another area, as described in Split a Stitch Block^[104]. Note that this function work good on one connected area of stitches only so this splitting step is important to get a good result.
2. Select the **Convert Manual Stitch Block**  icon from the Stitch Block Edit Toolbar^[146] on the Primary Bar^[114].
3. Click on the stitch block you want to process, the outline of the area enclosing the block will be created and the appropriate stitch type will be shown on the settings bar. If the stitch type is wrong change it to the correct one. Change the settings and options for the stitch type if needed.
4. Click **Enter** from the right-click context menu to start processing.
5. If successful, the Manual Stitch block will be changed to the new stitch type selected with all the accompanying properties. Outline objects will also be created.

6.5 Stitch Point(s) Editing

This function is used to edit stitch points within a stitch block. To use,

1. Select a stitch block which contains the stitch points you want to select (refer to Select Stitch Block(s)^[14] for more details).
2. Click on the **Stitch Edit**  icon of the Stitch Point Edit Toolbar^[145] on the Primary Bar^[114].
 - Select Stitch Point(s)^[103]
 - Move Stitch Point(s)^[104]
 - Insert Stitch Point(s)^[104]
 - Remove Stitch Point(s)^[104]
 - Split a Stitch Block^[104]
 - Change Machine Code^[104]

6.5.1 Select Stitch Point(s)

Follow the steps below to select stitch point(s) in a stitch block:

1. To select a single stitch point, just click on it. Note that selected points will be highlighted by small squares over them.

2. To select consecutive stitch points, click on a point and with the Shift key down click on another point. The points between these 2 points, including themselves, will be selected.
3. Alternatively, you can select consecutive stitch points by first click on a point and then with the Shift key down, press the left, right arrow keys to select points before or after it.
4. To select points that are not consecutive, hold down the CTRL key and then click on the points. Note that if you click on an already selected points with the CTRL key down the point will be de-selected.
5. To de-select all points, just click on an empty area.

6.5.2 Move Stitch Point(s)

Follow the steps below to move stitch point(s) in a stitch block:

1. Select the stitch point(s) you want to move (refer to Select Stitch Point(s) ¹⁰³ for more details).
2. Hold down the mouse button on one of the select points and drag the points to where you want.
3. Release the button to end.

6.5.3 Insert Stitch Point(s)

Follow the steps below to insert stitch point(s) to a stitch block:

1. Select a stitch point where you want to insert points (refer to Select Stitch Point(s) ¹⁰³ for more details).
2. Right-click in the Design Window and select **Insert Stitches** from the context menu.
3. Click in the Design Window once will insert a stitch point at the position of the cursor.
4. Double click in the Design Window to end.
5. Alternatively, you can right-click in the Design Window and select **Add** from the context menu. This will insert a single stitch point at the middle of the selected point and the point immediately before it.

6.5.4 Remove Stitch Point(s)

Follow the steps below to remove stitch point(s) from a stitch block:

1. Select the stitch point(s) you want to remove (refer to Select Stitch Point(s) ¹⁰³ for more details).
2. Right-click in the Design Window and select **Remove** from the context menu.
3. The selected stitch point(s) will be removed.

6.5.5 Split a Stitch Block

Follow the steps below to split a stitch block:

1. Select the stitch point at where you want the stitch block split (refer to Select Stitch Point(s) ¹⁰³ for more details).
2. Right-click in the Design Window and select **Separate Stitches** from the context menu.

6.5.6 Change Machine Code

Follow the steps below to change the machine code of a stitch point in a stitch block:

1. Select the stitch point you want to change (refer to Select Stitch Point(s) ¹⁰³ for more details).
2. Right-click in the Design Window and select **Machine Code** from the context menu.
3. Select the desired machine code from the submenu.

6.6 Remove Short Stitches

This function is useful in "cleaning up" a design before sending it to a machine by automatically removing stitches in a design shorter than a certain length, determined by the user. To use, follow the steps below:

1. Select the **Short Stitch Removal**  icon from the Stitch Point Edit Toolbar ^[145] on the Primary Bar ^[114]. The Short Stitch Removal Bar ^[147] will appear, as shown below



2. Enter a length in mm in **Shortest**.
3. Check **Retain edge stitches** if you want to exclude edge turning stitch points from removal.
4. Click **Do**. The program will automatically remove stitches shorter than the length you've entered in **Shortest**.

6.7 Frame Move

Frame move is useful if you need to add accessory, like appliqué, to the sewing. Essentially, what this operation does is to move the frame to a user specified location and the stop the machine. User will perform whatever is needed and then restart the machine. The frame will be moved to the next sewing position before moving. To use, follow the steps below:

1. Select the stitch block at the end of which you want to add a frame move code (refer to Select Stitch Block(s) ^[14] for more details).
2. Select the **Insert Move Frame Code**  icon from the Machine Control Toolbar ^[146] on the Stitch Creation Bar ^[130].
3. Click in the Design Window to insert the move frame code at the location you want. The move frame code will be highlighted by a blue triangle. The frame will be moved to this location after the stitch block finished sewing and the machine will be stopped. After resume sewing, the frame will be moved to the beginning of the next stitch block.

6.8 Change Design Properties

Design Properties can be found in **Properties** under the Edit Menu ^[110] (refer to Design Properties Dialog Box ^[160] for more details). Here you can change the following design properties:

- **Canvas**
See Change Canvas of a Design ^[95] for more details.
- **Design In/Out points**
You can choose to place the design In/Out at Design Center (center of all stitches), File Center (center of the canvas), First and Last Stitch or Manually. If choose Manually, select the **Design In/Out Points**  icon from the Stitch Block Edit Toolbar ^[146] on the Primary Bar ^[114] and draw the In/Out Points in the Design Window directly.
- **Design Information**
Design Number
Customer Number
Customer Name
Job Number
Digitizer
Description
Keywords
- **Production Information**
Marker Number
Hoop Number
Appliqué Number
Backing
Topping

7 System Functions

7.1 Settings Preview

You can preview the result of the current settings of the current stitch type using the Setting Preview Window. To turn it on/off, select **Settings Preview** from the View Menu ^[111]. The window will be automatically updated when you change a setting or to another stitch type.

7.2 Freeze Cursor

Sometimes it is useful to freeze the cursor to the horizontal (X) or vertical (Y) directions, e.g. when drawing horizontal lines, it will be easy to do so with the cursor froze in the horizontal (X) direction.

To freeze the cursor in the horizontal direction, select **X Freeze** from the View Menu ^[111]. To freeze the cursor in the vertical direction, select **Y Freeze** from the View Menu ^[111]. Select **Free** to unfreeze.

You may also press the **F2** key on the keyboard to toggle between the **Free**, **X Freeze** and **Y Freeze** modes.

7.3 Search Machine Code

Machine codes are codes that are used to control the behaviour of the embroidery machine, like hit, jump and trim etc. With SEDS II Achiever it is possible to view and/or edit the machine codes giving you even more control of the final output file. To use,

1. Click on the  icon on the Stitch View Control Bar ^[143].
2. All the machine codes will be displayed in the Design Window.
3. Use the Search Machine Code Options Bar ^[125] to navigate through the machine code, or select the appropriate action from the right-click context menu.
4. To change a machine code, right-click on it and select the new code from the **Machine Code** submenu.

7.4 Statistics

The Statistics function provides useful information about a design. Click on the  icon on the Main Bar ^[113], or select **Statistics** from the Tools Menu ^[113] will open the Statistics dialog box, as shown below:



Stitch Statistics

Design Information

File Name: test

File Size: X: 100.00 Y: 100.00

Design Size: X: 26.28 Y: 61.80

Start Point: X: 45.36 Y: 50.95

Offset From Start Point:

Left: 13.14 Right: 13.14

Up: 30.90 Down: 30.90

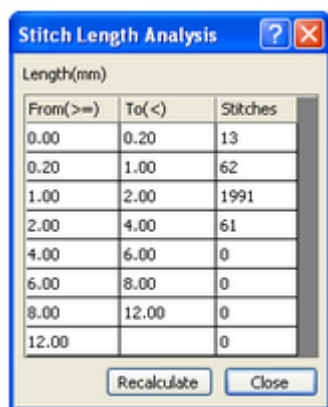
Close

Length

Help

Color(s)	Stitches	Trim(s)	Jump(s)	Thread(m)
1(1)	532	0	3	0.73
2(2)	532	0	5	0.73
3(3)	531	0	7	0.73
4(4)	532	0	7	0.73
Total:	2127	0	22	2.94

- File Name - Name of the design.
- File Size - File size of the design in mm, **X** denotes the width and **Y** the height.
- Design Size - Actual size of the design in mm, **X** denotes the width and **Y** the height.
- Start Point - Distance from the file origin (lower-left corner) in mm, **X** in the horizontal direction and **Y** in the vertical direction.
- Offset From Start Point - Shows how far the design goes in the left, right, up and down directions from the start point.
- Color(s) - Show all the colors in the design. The first number in the color box denotes the color number used in the program and the number in bracket denotes the needle number.
- Stitches - Show the total number of stitches in a given color.
- Trim(s) - Show the total number of trim codes in a given color.
- Jump(s) - Show the total number of jump codes in a given color.
- Thread(m) - Show the total thread length required for a given color in meter.
- Length - Display more detail stitch lengths statistics. The Stitch Length Analysis dialog box will be opened when click on **Length**, as shown below:



Stitch Length Analysis

Length(mm)

From(>=)	To(<)	Stitches
0.00	0.20	13
0.20	1.00	62
1.00	2.00	1991
2.00	4.00	61
4.00	6.00	0
6.00	8.00	0
8.00	12.00	0
12.00		0

Recalculate

Close

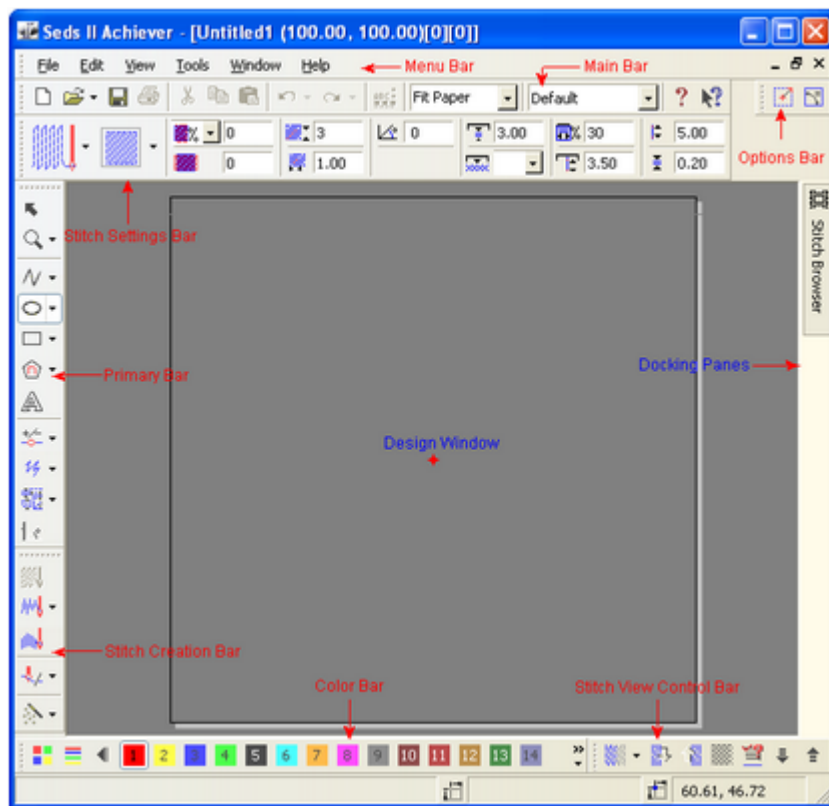
Each row shows the total number of stitches with lengths between **From(>=)** and **To(<)**. You can customize the values in 2nd to 7th row of **From(>=)** to suit your needs. Click **Recalculate** to recalculate lengths after changing values.

8 About the Program

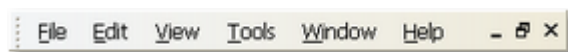
8.1 Interface

8.1.1 The Program Window

Below is the SEDS II Achiever Program Window.



8.1.2 Menu Bar



- File Menu ¹⁰⁸
- Edit Menu ¹¹⁰
- View Menu ¹¹¹
- Tools Menu ¹¹³
- Window Menu ¹¹³
- Help Menu ¹¹³

8.1.2.1 File Menu

- **New**
Create a new, blank design file.
- **Open**
Open an existing design file in one of the supported format (eds, edf, edp, tap, dst, fmc, fdr, zsk, cnd, exp, pec, pes, pcs, pcm, ksm, hus, sew).

- **Reopen**
Select from the submenu a list of recent opened files to reopen.
- **Merge**
Open an existing design file into the active Design Window.
- **Close**
Close the active Design Window but does not exit the program.
- **Save**
Save the current design to its current file name and location.
- **Save As**
Save the current design under a different name or to a different location or as a different format (eds, tap, dst, cnd, exp, pes, pec, pcs, pcm, ksm, hus, sew).
- **Import**
 - **Import Image**
Import an image into the active Design Window or as a new Design Window.
 - **Import Simulation Background Image**
Import an image to use as the background for simulation display.
 - **Import Vector File**
Import a vector file (wmf) into the active file or as a new file.
 - **Import From Tape**
Import data from a paper tape through a tape reader into the active file or as a new file.
- **Export**
 - **Export Image**
Export the image in the active file to a different name and location. If there is no image in the active file, this function is disabled.
 - **Export Objects**
Export the selected objects in the active file to a vector file in a different name or location (dxf, wmf). If there is no selected objects, this function is disabled.
 - **Export Motif**
Export the selected stitch blocks in the active file as a motif file. If there is no selected stitch blocks, this function is disabled.
 - **Punch Floppy Export**
Export the active file to a machine readable format in a different name or location, usually a floppy disk (dst, fmc, fdr, zsk, cnd, exp).
 - **Punch Tape Export**
Export the active file to a paper tape in different formats through a tape puncher. (Tajima, Barudan, ZSK)
 - **Punch Direct Export**
Export the active file directly to an embroidery machine through dedicated connections.
- **Floppy Disk Format**
Format a floppy diskette in various formats (DOS, FDR, FMC, ZSK, MELCO).
- **Acquire Image**
Acquire an image through a TWAIN compatible input device, usually a scanner.
- **Select Source**
Select a TWAIN compatible input device, usually a scanner, from a list of available devices.
- **Album Manager**
Invokes the Album Manager dialog box for designs management.
- **Print Setup**
Select a printer and its properties.
- **Print**
Print the contents in the active Design Window.
- **Publish HTML File**
Convert the active file into a HTML file.
- **Send Mail**
Send the active file as an attachment by the default e-mail program.
- **Exit**
Terminate the program.

8.1.2.2 Edit Menu

- **Undo**
Reverse the changes of the last operation.
- **Redo**
Reverse the changes of the last **Undo**.
- **Cut**
Delete the selected objects and stitch blocks from the active Design Window and place them into the clipboard.
- **Copy**
Make a copy of the selected objects and stitch blocks from the active Design Window and place them into the clipboard.
- **Paste**
Copy the contents of the clipboard into the active Design Window.
- **Paste Image**
 - **As New Design**
Create a new file and import the image in the clipboard into it.
 - **Into Current Design**
Import the image in the clipboard into the active file.
- **Delete**
Delete the selected objects and stitch blocks from the active Design Window.
- **Select All**
Select all objects and stitch blocks in the active Design Window.
- **De-select All**
De-select all objects and stitch blocks in the active Design Window.
- **Additive Select**
On/Off. When an object is created, turning this on will have the object selected with original selected objects. Otherwise only the newly created object is selected.
- **Reduce Image Color**
Automatically reduce the colors of the image in the active Design Window. If there is no image, this function is disabled.
- **Image X-Mirror**
Mirror the background image of the active Design Window in the horizontal direction.
- **Image Y-Mirror**
Mirror the background image of the active Design Window in the vertical direction.
- **Image Rotate**
Rotate the image of the active Design Window by a arbitrary angle.
- **Image Edit**
Invoke the default image editor to edit the background image.
- **Select Image Editor**
Select and change the default image editor.
- **Align & Distribute**
 - **Align Top**
Align all the currently selected objects and stitches to the top of the bounding rectangle.
 - **Align Bottom**
Align all the currently selected objects and stitches to the bottom of the bounding rectangle.
 - **Align Left**
Align all the currently selected objects and stitches to the left of the bounding rectangle.
 - **Align Right**
Align all the currently selected objects and stitches to the right of the bounding rectangle.
 - **Align Vertical Center**
Align all the currently selected objects and stitches to the vertical center of the bounding rectangle.
 - **Align Horizontal Center**
Align all the currently selected objects and stitches to the horizontal center of the bounding rectangle.
 - **Vertical Even Spacing**
Rearrange the currently selected objects and stitches to even vertical spacing.
 - **Horizontal Even Spacing**
Rearrange the currently selected objects and stitches to even horizontal spacing.
- **Compact Design Colors**
Find all colors used in the active file and re-arrange them as color 1,2,3... in the **Color Bar**.

- **X-Mirror**
Flip the selected objects and stitch blocks of the active Design Window horizontally.
- **Y-Mirror**
Flip the selected objects and stitch blocks of the active Design Window vertically.
- **Object Properties**
Open the Object Properties dialog box to change location, size, rotation etc of the current selected objects.
- **Lettering Properties**
Open the Lettering Properties dialog box to change font, alignment, text etc of the current selected lettering.
- **Search Machine Code**
Search for special machine code in the active Design Window.
- **Design Properties**
Open the Properties dialog box for the current design.

8.1.2.3 View Menu

- **Design View**
 - **Display Stitches With Needle Points**
On/Off. If on, a dot is shown at each stitch point.
 - **Display Stitch In/Out Points**
On/Off. If on, a green dot is shown at each In point and a red dot is shown at each Out point.
 - **Display Stitches With Machine Code**
On/Off. If on, machine codes are shown in green rectangles. Hit stitches are not shown.
 - **Display Stitches With Jump Lines**
On/Off. If on, jump lines are shown as green dotted lines.
 - **Display Underlay Stitches Only**
On/Off. If on, only underlay stitches are shown.
 - **Display Stitches With Underlay**
On/Off. If on, both top and underlay stitches are shown. Otherwise only top stitches shown.
 - **Display All Stitches**
On/Off. If on, display all stitch blocks no matter what types. Turn off automatically if turn on other display mode in the group.
 - **Display Last 2 Stitch Blocks**
On/Off. If on, display the last 2 stitch blocks only. Turn off automatically if turn on other display mode in the group.
 - **Display Manual/Jump Stitches Only**
On/Off. If on, display manual and jump stitch blocks only. Turn off automatically if turn on other display mode in the group.
 - **Display Fill Stitches Only**
On/Off. If on, display fill stitch blocks only. Turn off automatically if turn on other display mode in the group.
 - **Display Satin Stitches Only**
On/Off. If on, display satin stitch blocks only. Turn off automatically if turn on other display mode in the group.
 - **Display Line Stitches Only**
On/Off. If on, display line stitch blocks only. Turn off automatically if turn on other display mode in the group.
 - **Display Selected Stitches Only**
On/Off. If on, display selected stitch blocks only no matter what types. Turn off automatically if turn on other display mode in the group.
 - **Display Selected Stitches With Background**
On/Off. If on, the selected stitch blocks, no matter what types, will be displayed as usual. All other stitch blocks will be "grey-out". Turn off automatically if turn on other display mode in the group.
 - **Display Stitches**
On/Off. If on, stitch blocks will be displayed.
 - **Display Objects**
On/Off. If on, objects will be displayed.
 - **Display Background Image**
On/Off. If on, the background image will be displayed. This function will be disabled if there is no background image.
- **Aerial View**
On/Off. Turn on/off the aerial view window.
- **Settings Preview**
Turn on/off the Settings Preview Window.

- **Show Grid**
On/Off. Turn on/off grid lines display.
- **Show Ruler**
On/Off. Turn on/off ruler display.
- **Zoom In**
Zoom in to the next level.
- **Zoom Out**
Zoom out to the next level.
- **Zoom to Selection**
Zoom the current selected objects and stitch blocks to the size of the Design Window.
- **Last Zoom**
Zoom to the last zoom level.
- **Simulation Background**
 - **Single Color**
Use the background color as the background during simulation display.
 - **Default Pattern**
Use the default pattern as the background during simulation display.
 - **Background Image**
Use the selected background image as the background during simulation display.
- **Simulation Display**
On/Off. Turn on/off 3D simulation display of stitches.
- **Slow Redraw**
Redraw stitches from the start in various speeds.
- **Simulation Slow Redraw**
Redraw stitches from the start in various speeds in 3-D simulation display.
- **Toolbars**
 - **Status Bar**
On/Off. Turn on/off display of the status bar.
 - **Main Bar**
On/Off. Turn on/off display of the main bar.
 - **Color Bar**
On/Off. Turn on/off display of the color bar.
 - **Primary Bar**
On/Off. Turn on/off display of the primary bar.
 - **Stitch Creation Bar**
On/Off. Turn on/off display of the stitch creation bar.
 - **Stitch Settings Bar**
On/Off. Turn on/off display of the stitch settings bar.
 - **Stitch View Control Bar**
On/Off. Turn on/off display of the stitch view control bar.
 - **Layer Manager**
Turn on/off the Layer Manager docking pane.
 - **Stitch Browser**
Turn on/off the Stitch Browser docking pane.
- **Reset Position**
Return all toolbars to their default positions.
- **Free**
On/Off. If on, the cursor is not confined. Turn off automatically if X Freeze or Y Freeze is on.
- **X Freeze**
On/Off. If on, the cursor is confined in the horizontal direction. Turn off automatically if Free or Y Freeze is on.
- **Y Freeze**
On/Off. If on, the cursor is confined in the vertical direction. Turn off automatically if Free or X Freeze is on.
- **Theme**
 - **Office 2000**
Use Office 2000 style theme for menubar and toolbars.
 - **Office XP**
Use Office XP style theme for menubar and toolbars.
 - **Windows XP**
Use Windows XP style theme for menubar and toolbars.

- **Office 2003**
Use Office 2003 style theme for menubar and toolbars.

8.1.2.4 Tools Menu

- **Options**
Open the Program Options dialog box.
- **Edit Machine Code Filter**
Open the Edit Machine Code Filter dialog box.
- **Settings Manager**
Open the Settings Manager dialog box.
- **Statistics**
Open the Statistics dialog box.
- **Pattern Manager**
Invoke the Pattern Manager dialog box to select and edit patterns.
- **Motif Manager**
Invoke the Motif Manager dialog box to select and edit motifs.
- **Lettering Input Wizard**
Open the 'Lettering Input Wizard' for input lettering.
- **OneTouch Wizard**
Invoke the OneTouch Wizard for OneTouch auto-digitizing.

8.1.2.5 Window Menu

- **Cascade**
Cascade all opened design windows.
- **Tile**
Tile all opened Design Windows.

8.1.2.6 Help Menu

- **User's Guide**
Open the online user's guide.
- **Website Online**
Open an Internet browser and jump to our web site.
- **Activate Font**
Enter the registration code to activate font(s).
- **About**
Open the About dialog box.

8.1.3 ToolBars

8.1.3.1 Main Bar

**New**

Create a new, blank design file.

**Open**

Open an existing design file in one of the supported format (eds, edf, edp, tap, dst, fmc, fdr, zsk, cnd, exp, pec, pes, pcs, pcm, ksm, hus, sew).

Click the arrow on the right to display a list of recent opened files and select from the list to reopen the file.

**Save**

Save the current design to its current file name and location.

**Print**

Print the contents in the active Design Window.

**Cut**

Delete the selected objects and stitch blocks from the active Design Window and place them into the clipboard.

**Copy**

Make a copy of the selected objects and stitch blocks from the active Design Window and place them into the clipboard.

**Paste**

Copy the contents of the clipboard into the active Design Window.

**Undo**

Reverse the changes of the last operation.

Click the arrow on the right to display a list of previous operations and select from the list to undo operations up to that point.

**Redo**

Reverse the changes of the last **Undo**.

Click the arrow on the right to display a list of next operations and select from the list to redo operations up to that point.

**Statistics**

Open the Statistics dialog box.

**Zoom Level**

Shows the current zoom level and allow you to select from the pull down list of pre-defined zoom levels or input your own.

**Current Settings**

Display and select the current setting file.

**About**

Open the About dialog box.

**What's this?**

Click to enter the context-sensitive help mode. In this help mode you can left click another object to display a context-sensitive help window for that object. The help window provides a brief explanation about the object and how to use it.

Note

Press **ESC** to cancel the context-sensitive help mode.

8.1.3.2 Primary Bar

**Selection**

Objects and Stitch Blocks selection tool.



Zoom Toolbar ^[144]



Line Toolbar ^[144]



Ellipse Toolbar ^[144]



Rectangle Toolbar ^[145]



Polygon/Star Toolbar ^[145]

**Lettering**

If no lettering is selected, open the 'Lettering Input Wizard'. Otherwise, change certain properties of the currently selected lettering.



Object Manipulation Toolbar ^[145]



Stitch Point Edit Toolbar ^[145]



Stitch Block Edit Toolbar ^[146]

**Measure**

Measure length and angle.

8.1.3.3 Color Bar



-  **Color Palette**
Display the Color dialog box for reviewing or adjusting color palette.
-  **Thread Charts**
Display the thread charts dialog box.
-  **Scroll Colors Left**
Scroll colors by one to the left.
-  **Scroll Colors Right**
Scroll colors by one to the right.

8.1.3.4 Options Bar

For different functions there are different options and its corresponding options bar will be shown when the function is invoked.

- Lettering Options Bar ^[115]
- Fill Type Options Bar ^[117]
- Satin Type Options Bar ^[118]
- Line Type Options Bar ^[119]
- Lettering Type Options Bar ^[120]
- Special Type Options Bar ^[122]
- Miscellaneous Options Bar ^[123]
- Pop-up Options ^[125]

8.1.3.4.1 Lettering Options Bar

These options bar are used during Lettering input:

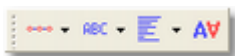
- Lettering Input Options Bar ^[115]
- Lettering in Box/Diamond Options Bar ^[115]
- Lettering on 1 Line Options Bar ^[116]
- Lettering between 2 Lines Options Bar ^[116]
- Lettering on 1 Object Options Bar ^[116]
- Lettering between 2 Objects Options Bar ^[117]

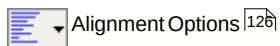
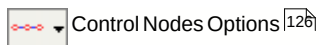
8.1.3.4.1.1 Lettering Input Options Bar



- **Font Type**
Four types, TTF Fill, TTF Satin, SEDS Fill and SEDS Satin are available. The SEDS types are pre-digitized font types.
- **Font Name**
The name of the font.
-  **B** **Bold**
Create text in bold mode, supported in TTF fonts only.
-  **I** **Italic**
Create text in italic mode, supported in TTF fonts only.

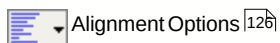
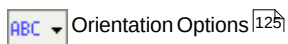
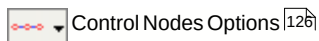
8.1.3.4.1.2 Lettering in Box/Diamond Options Bar



**Auto Spacing**

If button is down, turn on adjust spacing between characters automatically, off otherwise.

8.1.3.4.1.3 Lettering on 1 Line Options Bar

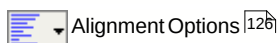
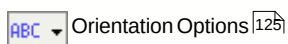
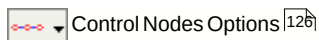
**Absolute Angle**

If button is down, the rotation angle is relative to the horizontal direction, otherwise it is relative to the base object.

**Auto Spacing**

If button is down, turn on adjust spacing between characters automatically, off otherwise.

8.1.3.4.1.4 Lettering between 2 Lines Options Bar

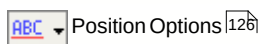
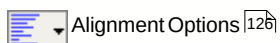
**Absolute Angle**

If button is down, the rotation angle is relative to the horizontal direction, otherwise it is relative to the base object.

**Auto Spacing**

If button is down, turn on adjust spacing between characters automatically, off otherwise.

8.1.3.4.1.5 Lettering on 1 Object Options Bar

**Absolute Angle**

If button is down, the rotation angle is relative to the horizontal direction, otherwise it is relative to the base object.

**Auto Spacing**

If button is down, turn on adjust spacing between characters automatically, off otherwise.

8.1.3.4.1.6 Lettering between 2 Objects Options Bar



Orientation Options ¹²⁵



Alignment Options ¹²⁶

**Absolute Angle**

If button is down, the rotation angle is relative to the horizontal direction, otherwise it is relative to the base object.

**Auto Spacing**

If button is down, turn on adjust spacing between characters automatically, off otherwise.

8.1.3.4.2 Fill Type Options Bar

These options bar are used in Fill Stitch Type:

- Normal Fill Options Bar ¹¹⁷
- Jagged Fill Options Bar ¹¹⁷
- Pattern Fill Options Bar ¹¹⁷
- Column Fill Options Bar ¹¹⁸
- Jagged Column Fill Options Bar ¹¹⁸

8.1.3.4.2.1 Normal Fill Options Bar



Lock Stitch Options ¹²⁷



Fill Stitch Boundary Options ¹²⁷

8.1.3.4.2.2 Jagged Fill Options Bar



Lock Stitch Options ¹²⁷



Jag Direction Options ¹²⁷

8.1.3.4.2.3 Pattern Fill Options Bar



Lock Stitch Options ¹²⁷



Fill Stitch Boundary Options ¹²⁷

8.1.3.4.2.4 Column Fill Options Bar



 Lock Stitch Options ^[127]

 Column Fill Mode Options ^[127]

8.1.3.4.2.5 Jagged Column Fill Options Bar



 Lock Stitch Options ^[127]

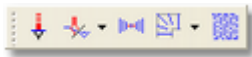
 Jag Direction Options ^[127]

8.1.3.4.3 Satin Type Options Bar

These options bar are used in Satin Stitch Type:

- One Line Satin Options Bar ^[118]
- Two Line Satin Options Bar ^[118]
- Pattern Fill Satin Options Bar ^[119]
- Jagged Satin Options Bar ^[119]

8.1.3.4.3.1 One Line Satin Options Bar



 **Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

 Lock Stitch Options ^[127]

 **Auto Span**

If button is down, adjust density automatically according to stitch widths. Even density otherwise.

 Cornering Options ^[128]

 **Random Inner Stitches**

If button is down, inner stitches, if added, will be created in a random way.

8.1.3.4.3.2 Two Line Satin Options Bar



 **Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

 Lock Stitch Options ^[127]

 Satin Pattern Options ^[128]

**Auto Span**

If button is down, adjust density automatically according to stitch widths. Even density otherwise.

**Force Stitch on Guide Line**

If button is down, the program will force the generation of stitches exactly at the location of the guide lines created. Otherwise the program will smooth stitches out to give a better result.

**Cornering Options** ^[128]**Random Inner Stitches**

If button is down, inner stitches, if added, will be created in a random way.

8.1.3.4.3 Pattern Fill Satin Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

**Lock Stitch Options** ^[127]**Force Stitch on Guide Line**

If button is down, the program will force the generation of stitches exactly at the location of the guide lines created. Otherwise the program will smooth stitches out to give a better result.

8.1.3.4.3.4 Jagged Satin Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

**Lock Stitch Options** ^[127]**Satin Pattern Options** ^[128]**Jag Direction Options** ^[127]**Force Stitch on Guide Line**

If button is down, the program will force the generation of stitches exactly at the location of the guide lines created. Otherwise the program will smooth stitches out to give a better result.

**Auto Span**

If button is down, adjust density automatically according to stitch widths. Even density otherwise.

**Random Inner Stitches**

If button is down, inner stitches, if added, will be created in a random way.

8.1.3.4.4 Line Type Options Bar

These options bar are used in Line Stitch Type:

- Single Line Options Bar ^[119]
- Double Line Options Bar ^[120]
- E-Stitch Options Bar ^[120]
- Bean Stitch Options Bar ^[120]

8.1.3.4.4.1 Single Line Options Bar



**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

**Lock Stitch Options** ^[127]**Adjust to Path**

If button is down, stitch length will be adjusted to fit the path of the object where possible. Otherwise fixed stitch length will be used.

8.1.3.4.4.2 Double Line Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

**Lock Stitch Options** ^[127]**Adjust to Path**

If button is down, stitch length will be adjusted to fit the path of the object where possible. Otherwise fixed stitch length will be used.

8.1.3.4.4.3 E-Stitch Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

**Lock Stitch Options** ^[127]**E-Stitch Direction Options** ^[129]**Scale**

If button is down, stitch entities (e.g. motif, e-stitch, chain) will be scaled to fit object.

8.1.3.4.4.4 Bean Stitch Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

**Lock Stitch Options** ^[127]**Adjust to Path**

If button is down, stitch length will be adjusted to fit the path of the object where possible. Otherwise fixed stitch length will be used.

8.1.3.4.5 Lettering Type Options Bar

These options bar are used in Lettering Stitch Type:

- Satin Lettering Options Bar ^[121]
- Normal Fill Lettering Options Bar ^[121]
- Line Stitch Lettering Options Bar ^[121]
- Column Fill Lettering Options Bar ^[122]

8.1.3.4.5.1 Satin Lettering Options Bar


Needle Down

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.


Lock Stitch Options ^[127]

Trim

If button is down, a trim code will be inserted automatically at the end of a stitch block when it is created, otherwise no trim code will be added.


Auto Span

If button is down, adjust density automatically according to stitch widths. Even density otherwise.


Force Stitch on Guide Line

If button is down, the program will force the generation of stitches exactly at the location of the guide lines created. Otherwise the program will smooth stitches out to give a better result.


Cornering Options ^[128]

8.1.3.4.5.2 Normal Fill Lettering Options Bar

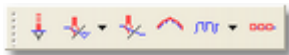

Lock Stitch Options ^[127]

Trim

If button is down, a trim code will be inserted automatically at the end of a stitch block when it is created, otherwise no trim code will be added.


Fill Stitch Boundary Options ^[127]

8.1.3.4.5.3 Line Stitch Lettering Options Bar


Needle Down

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.


Lock Stitch Options ^[127]

Trim

If button is down, a trim code will be inserted automatically at the end of a stitch block when it is created, otherwise no trim code will be added.


Adjust to Path

If button is down, stitch length will be adjusted to fit the path of the object where possible. Otherwise fixed stitch length will be used.


E-Stitch Direction Options ^[129]

Scale

If button is down, stitch entities (e.g. motif, e-stitch, chain) will be scaled to fit object.

8.1.3.4.5.4 Column Fill Lettering Options Bar

Lock Stitch Options ^[127]**Trim**

If button is down, a trim code will be inserted automatically at the end of a stitch block when it is created, otherwise no trim code will be added.

Column Fill Mode Options ^[127]

8.1.3.4.6 Special Type Options Bar

These options bar are used in Special Stitch Type:

- Line Motif Options Bar ^[122]
- Fill Motif Options Bar ^[122]
- Cross Stitch Options Bar ^[122]
- Photo Stitch Options Bar ^[123]

8.1.3.4.6.1 Line Motif Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

Lock Stitch Options ^[127]**Scale**

If button is down, stitch entities (e.g. motif, e-stitch, chain) will be scaled to fit object.

8.1.3.4.6.2 Fill Motif Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.

Lock Stitch Options ^[127]Fill Motif Alignment Options ^[129]

8.1.3.4.6.3 Cross Stitch Options Bar

Lock Stitch Options ^[127]

8.1.3.4.6.4 Photo Stitch Options Bar


Needle Down

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.


Lock Stitch Options ^[127]

Photo Stitch Type Options ^[129]

Photo Stitch Orientation Options ^[130]

Within Object

If button down, stitches will be created inside the area bounded by the selected object only. Otherwise stitches will be created on the whole image.

8.1.3.4.7 Miscellaneous Options Bar

These options bar are used in various system functions:

- Selection Options Bar ^[123]
- Zoom Options Bar ^[123]
- Ellipse/Rectangle Options Bar ^[124]
- Polygon/Star Options Bar ^[124]
- Manual Stitch Options Bar ^[124]
- Slow Redraw Options Bar ^[124]
- Search Machine Code Options Bar ^[125]

8.1.3.4.7.1 Selection Options Bar


Select By Color

Select all objects and stitch blocks in current color.

8.1.3.4.7.2 Zoom Options Bar


Zoom In

Zoom in to the next level.


Zoom Out

Zoom out to the next level.


Zoom to Window

Zoom all objects and stitch blocks to fit the size of the Design Window.


Zoom to Selection

Zoom the current selected objects and stitch blocks to the size of the Design Window.


Actual Size

Zoom to actual size of the design.


Zoom to Pre-defined Scale

Zoom to the scale pre-defined in Options.

8.1.3.4.7.3 Ellipse/Rectangle Options Bar

**First Point from Center**

If button is down, the first point clicked will define the center of the object.

**Regular Object**

If button is down, the width will be forced to be the same as the height of the object. Use for drawing circles, squares and equilateral polygons.

**Edge Points Draw**

Press this button down to draw objects with an angle. The first 2 points define the edge or center line of the object. The 3rd point defines a vertex of the bounding rectangle.

8.1.3.4.7.4 Polygon/Star Options Bar

**First Point from Center**

If button is down, the first point clicked will define the center of the object.

**Regular Object**

If button is down, the width will be forced to be the same as the height of the object. Use for drawing circles, squares and equilateral polygons.

**Edge Points Draw**

Press this button down to draw objects with an angle. The first 2 points define the edge or center line of the object. The 3rd point defines a vertex of the bounding rectangle.

**Number of Corners**

Select from the pull down box the number of corners (edges) for polygon and star objects.

8.1.3.4.7.5 Manual Stitch Options Bar

**Needle Down**

If button down, add split stitches across the middle for large width satin stitches, otherwise no split stitch will be added.



Lock Stitch Options ¹²⁷

8.1.3.4.7.6 Slow Redraw Options Bar

**Replay**

Redraw the design stitch by stitch starting from where it is last stopped or if not from the start of the design. You can control the speed during redraw.

**Start/Pause Playing**

Start/Pause the redraw of the stitches.

**Speed Control Bar**

Control the speed of redraw, move the handle to the right side will increase the speed, whereas to the left will decrease the speed.

**Forward 10 Stitches**

Redraw forward by 10 stitches at one time.

**Forward 100 Stitches**

Redraw forward by 100 stitches at one time.

-  **Backward 10 Stitches**
Redraw backward by 10 stitches at one time.
-  **Backward 100 Stitches**
Redraw backward by 100 stitches at one time.
-  **Backward One Stitch**
Redraw backward one stitch.
-  **Forward One Stitch**
Redraw forward one stitch.
-  **Previous Block**
Jump to the beginning of the previous stitch block.
-  **Next Block**
Jump to the beginning of the next stitch block.
-  **Previous Needle**
Jump to beginning of the previous needle.
-  **Next Needle**
Jump to the beginning of the next needle.

8.1.3.4.7.7 Search Machine Code Options Bar



-  **Previous Machine Code**
Move to the location of the previous machine code.
-  **Next Machine Code**
Move to the location of the next machine code.
-  **Previous Stitch**
Move to previous stitch.
-  **Next Stitch**
Move to next stitch.

8.1.3.4.8 Pop-up Options

Some icons have a small black triangle at the right side. For those icons, click on the small triangle will pop-up a list for more available options.

- Orientation Options ^[125]
- Control Nodes Options ^[126]
- Alignment Options ^[126]
- Position Options ^[126]
- Lock Stitch Options ^[127]
- Fill Stitch Boundary Options ^[127]
- Jag Direction Options ^[127]
- Column Fill Mode Options ^[127]
- Cornering Options ^[128]
- Satin Pattern Options ^[128]
- E-Stitch Direction Options ^[129]
- Fill Motif Alignment Options ^[129]
- Photo Stitch Type Options ^[129]
- Photo Stitch Orientation Options ^[130]

8.1.3.4.8.1 Orientation Options



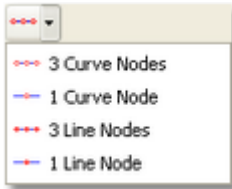
**Normal**

Lettering is in the normal upright direction.

**Inverted**

Lettering is inverted.

8.1.3.4.8.2 Control Nodes Options

**3 Curve Nodes**

Place 3 curve control nodes on each side.

**1 Curve Node**

Place 1 curve control node on each side.

**3 Line Nodes**

Place 3 line control nodes on each side.

**1 Line Node**

Place 1 line control node on each side.

8.1.3.4.8.3 Alignment Options

**Align Left**

Align text to the left.

**Align Center**

Align text to the center.

**Align Right**

Align text to the right.

**Align Free**

Characters are spaced evenly to fill the extent of the bounding object.

8.1.3.4.8.4 Position Options

**Above Object**

Place lettering above the object.

**Object at Middle**

Place the middle of the lettering along the object.

**Below Object**

Place lettering below the object.

8.1.3.4.8.5 Lock Stitch Options



-  **Auto Lock Stitch with Trim**
Automatically insert a lock stitch at the end of a stitch block if a trim code is added.
-  **Lock Stitch On**
Automatically insert a lock stitch each time a stitch block is created.
-  **Lock Stitch Off**
No lock stitch is added to a stitch block when it is created.

8.1.3.4.8.6 Fill Stitch Boundary Options



-  **Without Boundary Stitches**
End stitches are added along the outline of the object on alternate stitch lines.
-  **With Boundary Stitches**
End stitches are added along the outline of the object on each stitch line.

8.1.3.4.8.7 Jag Direction Options



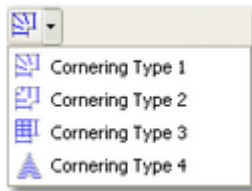
-  **Jag Left**
Create jagged stitches on the left side of the object only.
-  **Jag Both**
Create jagged stitches on both sides of the object.
-  **Jag Right**
Create jagged stitches on the right side of the object only.

8.1.3.4.8.8 Column Fill Mode Options



-  **Classic**
With this mode, stitches are created at an ordered manner.
-  **Modern**
With this mode, stitches are created at a more random manner.

8.1.3.4.8.9 Cornering Options

**Cornering Type 1**

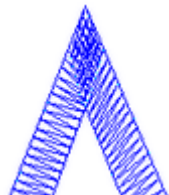
Use the cornering pattern as shown below:

**Cornering Type 2**

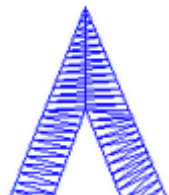
Use the cornering pattern as shown below:

**Cornering Type 3**

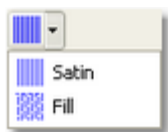
Use the cornering pattern as shown below:

**Cornering Type 4**

Use the cornering pattern as shown below:



8.1.3.4.8.10 Satin Pattern Options

**Satin Pattern : Regular**

Create regular Satin stitch.

**Satin Pattern : Normal Fill**

Create Satin stitch with normal fill pattern.

8.1.3.4.8.11 E-Stitch Direction Options

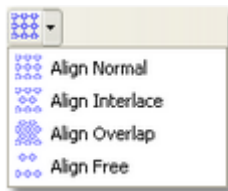
**E-Stitch Inside**

Create E-stitch on the inside of the object.

**E-Stitch Outside**

Create E-stitch on the outside of the object.

8.1.3.4.8.12 Fill Motif Alignment Options

**Align Normal**

Motifs are aligned at the same position on each row.

**Align Interlace**

Motifs are shifted by half the width of the motif each row.

**Align Overlap**

Motifs are shifted by half the width of the motif each row and the distance between rows is decreased by half the height of the motif.

**Align Free**

Motifs are shifted by a percentage of the width of the motif each row.

8.1.3.4.8.13 Photo Stitch Type Options

**Type 1 on White**

The image is divided into rows or columns and fill with fix span, variable length satin stitches. For sewing on light color fabric.

**Type 1 on Black**

The image is divided into rows or columns and fill with fix span, variable length satin stitches. For sewing on dark color fabric.

**Type 2 on White**

The image is divided into rows or columns and fill with variable span, multi-length satin stitches. For sewing on light color fabric.

**Type 2 on Black**

The image is divided into rows or columns and fill with variable span, multi-length satin stitches. For sewing on dark color fabric.

**Type 3 on White**

The image is divided into rows or columns and fill with fix length pattern satin stitches. For sewing on light color fabric.

**Type 3 on Black**

The image is divided into rows or columns and fill with fix length pattern satin stitches. For sewing on dark color fabric.

**Type 4 on White**

The image is divided into rows or columns and fill with variable span, variable length satin stitches. For sewing on light color fabric.

**Type 4 on Black**

The image is divided into rows or columns and fill with variable span, variable length satin stitches. For sewing on dark color fabric.

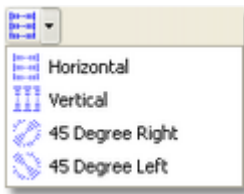
**Color Type 1**

The image is divided into rows and columns and fill with variable span, variable length satin stitches in 4 colors.

**Color Type 2**

The image is divided into rows and columns and fill with fix length pattern satin stitches in 4 colors.

8.1.3.4.8.14 Photo Stitch Orientation Options

**Horizontal**

For mode 1-4, satin stitches running in the horizontal direction.

**Vertical**

For mode 1-4, satin stitches running in the vertical direction.

**45 Degree Right**

For mode 1-4, satin stitches running at an angle of 45 degree to the right.

**45 Degree Left**

For mode 1-4, satin stitches running at an angle of 45 degree to the left.

8.1.3.5 Stitch Creation Bar

**Punching**

Start to create stitches on the selected objects using the current stitch mode.



Manual Stitch Toolbar ¹⁴⁶

**Freehand Satin**

Create freehand satin stitches.



Machine Control Toolbar ¹⁴⁶



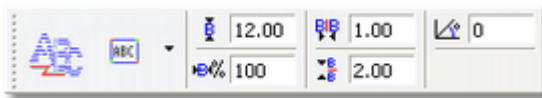
OneTouch Toolbar ¹⁴⁶

8.1.3.6 Stitch Settings Bar

The Stitch Settings Bar is used for both selecting stitch types and change settings. The first large icon on the Stitch Setting Bar allows you to select the major stitch type while the second one allows you to select a particular type from the major list. Depending on what level of the software you have, the stitch types available may vary. To select a different type, click on the small arrow on the right of the large icon and select the appropriate one from the pop-up bar.

- Lettering Settings Bar ¹³¹
- Fill Type Settings Bar ¹³²
- Satin Type Settings Bar ¹³⁴
- Line Type Settings Bar ¹³⁷
- Lettering Type Settings Bar ¹³⁸
- Special Type Settings Bar ¹⁴¹
- Miscellaneous Settings ¹⁴²

8.1.3.6.1 Lettering Settings Bar



Character Height

Height of characters in mm. Typically this gives the height of the capital letter 'A'.



Character Width

Width of character in percentage of the width proportional to the character height.



Character Space

Space between characters in mm.



Line Space

Space between lines in mm.



Character Angle

Defines the angle of each character relative to the base line when 'Absolute Angle' is off. Otherwise relative to the horizontal line.

8.1.3.6.1.1 Lettering Transformation Options



Lettering in Box

Lettering transformation within a box shape envelope. Drag and move the control nodes to adjust the shape of the envelope and thus the lettering inside.



Lettering in Diamond

Lettering transformation in a diamond shape envelope. Drag and move the control nodes to adjust the shape of the envelope and thus the lettering inside.

**Lettering on 1 Line**

Lettering transformation on a line. Drag and move the control nodes to adjust the shape of the line and thus the lettering on it.

**Lettering between 2 Lines**

Lettering transformation between 2 lines. Drag and move the control nodes to adjust the shape of a line and thus the lettering between the lines.

**Lettering on 1 Object**

Lettering transformation on a object. Click on individual letter to select and make adjustment accordingly.

**Lettering between 2 Objects**

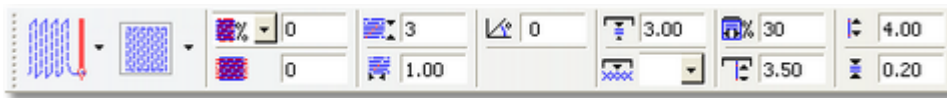
Lettering transformation between 2 objects. Click on individual letter to select and make adjustment accordingly.

8.1.3.6.2 Fill Type Settings Bar

These settings bar are used in Fill Stitch Type:

- Normal Fill Settings Bar ¹³²
- Jagged Fill Settings Bar ¹³³
- Pattern Fill Settings Bar ¹³³
- Column Fill Settings Bar ¹³⁴
- Jagged Column Fill Settings Bar ¹³⁴

8.1.3.6.2.1 Normal Fill Settings Bar



External Compensation Mode ¹⁴³

**Internal Compensation**

Reserved for future.

**Cycle**

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.

**Fill Offset**

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.

**Angle**

Angle of stitch lines.

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.



Fill Underlay Pattern ¹⁴³

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

**Underlay Length**

Space between underlay stitch points in mm.

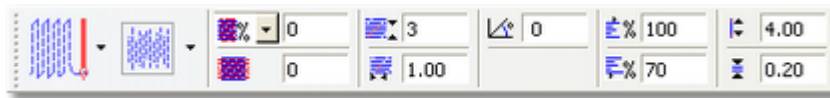
**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

8.1.3.6.2.2 Jagged Fill Settings Bar



 External Compensation Mode ^[143]

 **Internal Compensation**
Reserved for future.

 **Cycle**
Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.

 **Fill Offset**
Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.

 **Angle**
Angle of stitch lines.

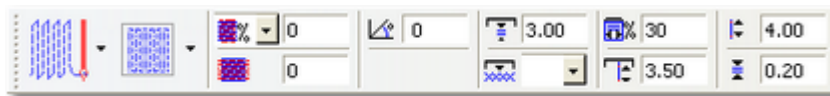
 **Maximum Jag Percentage**
Defines the maximum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

 **Minimum Jag Percentage**
Defines the minimum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

 **Length**
Distance between top stitch points in mm.

 **Span**
Defines the density of the top stitches, measured by the space between threads in mm.

8.1.3.6.2.3 Pattern Fill Settings Bar



 External Compensation Mode ^[143]

 **Internal Compensation**
Reserved for future.

 **Angle**
Angle of stitch lines.

 **Underlay Span**
Defines the density of underlay stitches, measured by the space between threads in mm.

 Fill Underlay Pattern ^[143]

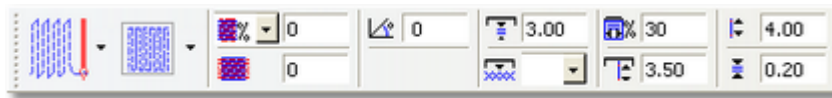
 **Underlay Gap**
Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

 **Underlay Length**
Space between underlay stitch points in mm.

 **Length**
Distance between top stitch points in mm.

 **Span**
Defines the density of the top stitches, measured by the space between threads in mm.

8.1.3.6.2.4 Column Fill Settings Bar



 External Compensation Mode ^[143]

 **Internal Compensation**
Reserved for future.

 **Angle**
Angle of stitch lines.

 **Underlay Span**
Defines the density of underlay stitches, measured by the space between threads in mm.

 Fill Underlay Pattern ^[143]

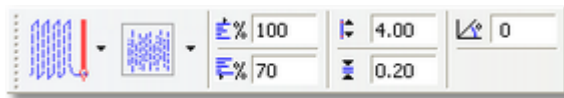
 **Underlay Gap**
Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

 **Underlay Length**
Space between underlay stitch points in mm.

 **Length**
Distance between top stitch points in mm.

 **Span**
Defines the density of the top stitches, measured by the space between threads in mm.

8.1.3.6.2.5 Jagged Column Fill Settings Bar



 **Maximum Jag Percentage**
Defines the maximum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

 **Minimum Jag Percentage**
Defines the minimum percentage of the width of the stitch block to which the program will randomly bring edge stitches.

 **Length**
Distance between top stitch points in mm.

 **Span**
Defines the density of the top stitches, measured by the space between threads in mm.

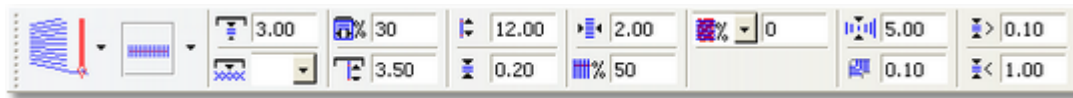
 **Angle**
Angle of stitch lines.

8.1.3.6.3 Satin Type Settings Bar

These settings bar are used in Satin Stitch Type:

- One Line Satin Settings Bar ^[135]
- Two Line Satin Settings Bar ^[135]
- Pattern Fill Satin Settings Bar ^[136]
- Jagged Satin Settings Bar ^[136]

8.1.3.6.3.1 One Line Satin Settings Bar

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.



Satin Underlay Pattern ^[142]

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

**Underlay Length**

Space between underlay stitch points in mm.

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Width**

Width of single line satin stitch in mm.

**Satin Offset**

Offset of the satin column from the center in percentage of total width.



External Compensation Mode ^[143]

**Highest Density Width**

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

**Corner Compensation**

Use with Corner Type 2 to set the amount of overlapping at corners.

**Minimum Span**

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

**Maximum Span**

Maximum (lightest) density. When auto-span is turned on, the program will automatically varies stitch density between the Span and Maximum Span value as a function of the width across the satin column at any given point. The narrower the column, the lighter the density.

8.1.3.6.3.2 Two Line Satin Settings Bar

**Cycle**

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.

**Fill Offset**

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.



Satin Underlay Pattern ^[142]

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

**Underlay Length**

Space between underlay stitch points in mm.

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.



External Compensation Mode ^[143]

**Highest Density Width**

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

**Corner Compensation**

Use with Corner Type 2 to set the amount of overlapping at corners.

**Minimum Span**

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).

**Maximum Span**

Maximum (lightest) density. When auto-span is turned on, the program will automatically varies stitch density between the Span and Maximum Span value as a function of the width across the satin column at any given point. The narrower the column, the lighter the density.

8.1.3.6.3.3 Pattern Fill Satin Settings Bar



External Compensation Mode ^[143]

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.



Satin Underlay Pattern ^[142]

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

**Underlay Length**

Space between underlay stitch points in mm.

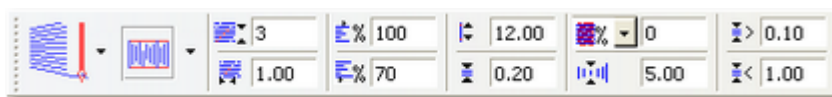
**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

8.1.3.6.3.4 Jagged Satin Settings Bar

**Cycle**

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.

**Fill Offset**

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.

-  **Maximum Jag Percentage**
Defines the maximum percentage of the width of the stitch block to which the program will randomly bring edge stitches.
-  **Minimum Jag Percentage**
Defines the minimum percentage of the width of the stitch block to which the program will randomly bring edge stitches.
-  **Length**
Distance between top stitch points in mm.
-  **Span**
Defines the density of the top stitches, measured by the space between threads in mm.
-  **External Compensation Mode** ^[143]
-  **Highest Density Width**
When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).
-  **Minimum Span**
When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).
-  **Maximum Span**
Maximum (lightest) density. When auto-span is turned on, the program will automatically varies stitch density between the Span and Maximum Span value as a function of the width across the satin column at any given point. The narrower the column, the lighter the density.

8.1.3.6.4 Line Type Settings Bar

These settings bar are used in Line Stitch Type:

- Single Line Settings Bar ^[137]
- Double Line Settings Bar ^[137]
- E-Stitch Settings Bar ^[138]
- Bean Stitch Settings Bar ^[138]

8.1.3.6.4.1 Single Line Settings Bar



-  **Length**
Distance between top stitch points in mm.

8.1.3.6.4.2 Double Line Settings Bar



-  **Length**
Distance between top stitch points in mm.
-  **Span**
Defines the density of the top stitches, measured by the space between threads in mm.
-  **Double Line Offset**
Offset of the double line from the center of the object in percentage of the span.

8.1.3.6.4.3 E-Stitch Settings Bar

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**E-Stitch Width**

Width of the 'E' in mm.

**E-Stitch Offset**

Offset of the 'E' from the center of the object in percentage of the width.

8.1.3.6.4.4 Bean Stitch Settings Bar

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Bean Stitch Offset**

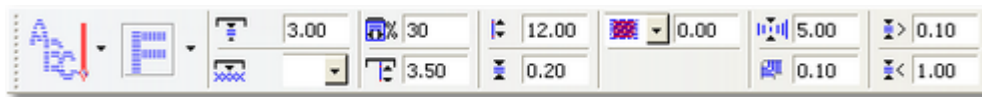
Offset of the bean stitch from the center of the object in percentage of the span.

8.1.3.6.5 Lettering Type Settings Bar

These settings bar are used in Lettering Stitch Type:

- Satin Lettering Settings Bar ^[138]
- Normal Fill Lettering Settings Bar ^[139]
- Line Stitch Lettering Settings Bar ^[140]
- Column Fill Lettering Settings Bar ^[140]

8.1.3.6.5.1 Satin Lettering Settings Bar

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.



Satin Underlay Pattern ^[142]

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

**Underlay Length**

Space between underlay stitch points in mm.

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

 External Compensation Mode ¹⁴³



Highest Density Width

When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).



Corner Compensation

Use with Corner Type 2 to set the amount of overlapping at corners.



Minimum Span

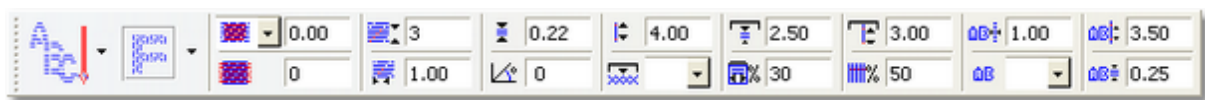
When auto-span is turned on, the program will automatically adjust stitch density between the Minimum Span and Maximum Span value as a function of the width across the satin column, for which the width is less than the Highest Density Width value. The narrower the column, the lighter the density (higher span).



Maximum Span

Maximum (lightest) density. When auto-span is turned on, the program will automatically varies stitch density between the Span and Maximum Span value as a function of the width across the satin column at any given point. The narrower the column, the lighter the density.

8.1.3.6.5.2 Normal Fill Lettering Settings Bar



 External Compensation Mode ¹⁴³



Internal Compensation

Reserved for future.



Cycle

Number of thread passes (1 pass = 1 back and forth loop) between a given stitch point and the next time it occurs in the same horizontal location, but further along in the fill.



Fill Offset

Distance between 1 stitch point and the closest stitch point on the thread adjacent to it, in mm.



Span

Defines the density of the top stitches, measured by the space between threads in mm.



Angle

Angle of stitch lines.



Length

Distance between top stitch points in mm.



Fill Underlay Pattern ¹⁴³



Underlay Span

Defines the density of underlay stitches, measured by the space between threads in mm.



Underlay Gap

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.



Underlay Length

Space between underlay stitch points in mm.



Satin Offset

Offset of the satin column from the center in percentage of total width.



Border Width

Width of the border stitches in mm.



Border Type ¹⁴³



Border Length

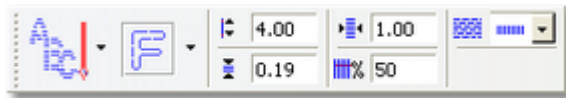
Length of border stitches in mm.



Border Span

Span (density) of border stitches in mm.

8.1.3.6.5.3 Line Stitch Lettering Settings Bar

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Line Stitch Width**

Depending on the line stitch type selected:

Width

Width of single line satin stitch in mm.

E-Stitch Width

Width of the 'E' in mm.

**Line Stitch Offset**

Depending on the line stitch type selected:

Double Line Offset

Offset of the double line from the center of the object in percentage of the span.

E-Stitch Offset

Offset of the 'E' from the center of the object in percentage of the width.

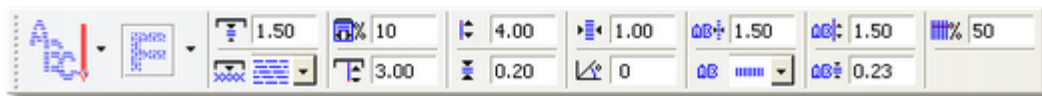
Bean Stitch Offset

Offset of the bean stitch from the center of the object in percentage of the span.



Line Stitch Type ^[143]

8.1.3.6.5.4 Column Fill Lettering Settings Bar

**Underlay Span**

Defines the density of underlay stitches, measured by the space between threads in mm.



Fill Underlay Pattern ^[143]

**Underlay Gap**

Amount of space that the underlay can be set to recede from the edge of the top stitches to prevent it from showing. Gap only appears along the direction of the stitches. Units = percentage of the width of the stitch block.

**Underlay Length**

Space between underlay stitch points in mm.

**Length**

Distance between top stitch points in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Width**

Width of single line satin stitch in mm.

**Angle**

Angle of stitch lines.

**Border Width**

Width of the border stitches in mm.



Border Type ^[143]

**Border Length**

Length of border stitches in mm.

**Border Span**

Span (density) of border stitches in mm.

**Satin Offset**

Offset of the satin column from the center in percentage of total width.

8.1.3.6.6 Special Type Settings Bar

These settings bar are used in Special Stitch Type:

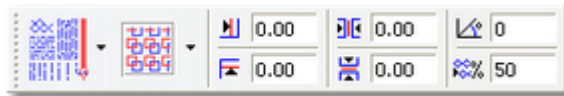
- Line Motif Settings Bar ^[141]
- Fill Motif Settings Bar ^[141]
- Cross Stitch Settings Bar ^[141]
- Photo Stitch Settings Bar ^[142]

8.1.3.6.6.1 Line Motif Settings Bar

**Motif Gap**

Distance between motifs in mm.

8.1.3.6.6.2 Fill Motif Settings Bar

**Parallel Offset**

Adjust this to shift motifs in the direction of a motif line.

**Perpendicular Offset**

Adjust this to shift motifs in the direction perpendicular to the motif line.

**Motif Gap**

Distance between motifs in mm.

**Perpendicular Gap**

Perpendicular distance between motif lines in mm.

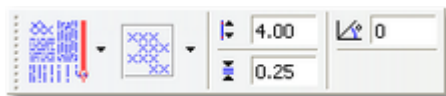
**Angle**

Angle of stitch lines.

**Displacement**

Motifs are shifted by percentage of the width of a motif from the previous row.

8.1.3.6.6.3 Cross Stitch Settings Bar

**Cross Stitch Length**

The distance in mm of the cross stitch pattern shown in blue below:



**Cross Stitch Span**

The distance in mm of the cross stitch pattern shown in blue below:

**Cross Stitch Angle**

Angle of the cross stitch pattern, as show below:

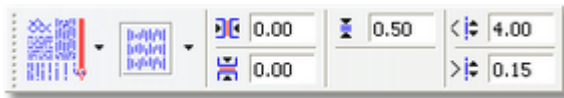


0 degree



45 degree

8.1.3.6.4 Photo Stitch Settings Bar

**X-Gap**

Space between columns in mm.

**Y-Gap**

Space between rows in mm.

**Span**

Defines the density of the top stitches, measured by the space between threads in mm.

**Maximum Stitch Length**

Maximum stitch length in mm.

**Minimum Stitch Length**

Minimum stitch length in mm.

8.1.3.6.7 Miscellaneous Settings

These are additional settings used in the settings bars:

- Satin Underlay Pattern ^[142]
- Fill Underlay Pattern ^[143]
- External Compensation Mode ^[143]
- Border Type ^[143]
- Line Stitch Type ^[143]

8.1.3.6.7.1 Satin Underlay Pattern

**Underlay Pattern : None**

Disable underlay stitches.

**Underlay Pattern : Single Line**

Use single line stitch for underlay.

**Underlay Pattern : Double Line**

Use double line stitch for underlay.

**Underlay Pattern : ZigZag**

Use zigzag stitch for underlay.

**Underlay Pattern : Double ZigZag**

Use double zigzag stitch for underlay.

**Underlay Pattern : Single Line + ZigZag**

Use single line stitch and zigzag stitch for underlay.

**Underlay Pattern : Single Line + Double ZigZag**

Use single line stitch and double zigzag stitch for underlay.

**Underlay Pattern : Double Line + ZigZag**

Use double line stitch and zigzag stitch for underlay.

**Underlay Pattern : Double Line + Double ZigZag**

Use double line stitch and double zigzag stitch for underlay.

8.1.3.6.7.2 Fill Underlay Pattern

**Underlay Pattern : None**

Disable underlay stitches.

**Underlay Pattern : Fill**

Use simple fill stitch for underlay.

**Underlay Pattern : Double Cross**

Use double cross stitch for underlay.

8.1.3.6.7.3 External Compensation Mode

**External Compensation by Percentage**

External compensation value calculated as a fraction of the width of the stitch block.

**External Compensation by (mm)**

External compensation in absolute value in mm.

8.1.3.6.7.4 Border Type

**Border : None**

Disable border stitches.

**Border : Satin**

Use satin stitch for border.

**Border : Single Line**

Use single line stitch for border.

**Border : Double Line**

Use double line stitch for border.

**Border : Bean Stitch**

Use bean stitch for border.

**Border : E-Stitch**

Use E stitch for border.

8.1.3.6.7.5 Line Stitch Type

**Single Line**

Use Single Line type for stitching.

**Double Line**

Use Double Line type for stitching.

**E-Stitch**

Use E-Stitch type for stitching.

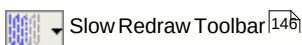
**Bean Stitch**

Use Bean Stitch type for stitching.

**Satin**

Use Satin type for stitching.

8.1.3.7 Stitch View Control Bar



**Next Stitch Block**

Select the stitch block following the current selected block.

**Previous Stitch Block**

Select the stitch block prior to the current selected block.

**Simulation Display**

On/Off. Turn on/off 3D simulation display of stitches.

**Search Machine Code**

Search for special machine code in the active Design Window.

**Image Darker**

Decrease the brightness of the background image.

**Image Brighter**

Increase the brightness of the background image.

8.1.3.8 Pop-up Toolbars

Some icons have a small black triangle at the right side. For those icons, click on the small triangle will pop-up a toolbar for more available functions.

- Zoom Toolbar ^[144]
- Line Toolbar ^[144]
- Ellipse Toolbar ^[144]
- Rectangle Toolbar ^[145]
- Polygon/Star Toolbar ^[145]
- Object Manipulation Toolbar ^[145]
- Stitch Point Edit Toolbar ^[145]
- Stitch Block Edit Toolbar ^[146]
- Manual Stitch Toolbar ^[146]
- Machine Control Toolbar ^[146]
- OneTouch Toolbar ^[146]
- Slow Redraw Toolbar ^[146]

8.1.3.8.1 Zoom Toolbar

**Zoom**

Provide Zoom functions such as zoom in, zoom out, zoom to fit window, zoom to objects and zoom to actual size.

**Pan Real-time**

Drag and pan.

8.1.3.8.2 Line Toolbar

**Line**

Polyline drawing function.

**Curve**

Curve drawing function.

8.1.3.8.3 Ellipse Toolbar

**Ellipse**

Elliptical shape drawing function.

**Concentric Ellipse**

Concentric ellipse drawing function.

**Arc**

Circular arc drawing function.

8.1.3.8.4 Rectangle Toolbar

**Rectangle**

Rectangular shape drawing function.

**Concentric Rectangle**

Concentric rectangle drawing function.

8.1.3.8.5 Polygon/Star Toolbar

**Polygon**

Polygon shape drawing function.

**Star**

Star shape drawing function.

8.1.3.8.6 Object Manipulation Toolbar

**Add/Delete Anchor Points**

Add/Delete object anchor points.

**Geometric Transform**

Object transformation within a box shape envelope. Drag and move the control nodes to adjust the shape of the envelope and thus the object inside.

**Cut Object**

Cut the current select object. If object is open, it will be separated into 2 objects. If closed, it will become opened.

**Join Object**

If 2 objects are selected, they will be combined to become a single object. If 1 opened object is selected, it will be closed by adding a line joining the start and the end points.

**Cut Closed Object**

Cut the selected closed object into 2 closed objects.

8.1.3.8.7 Stitch Point Edit Toolbar

**Stitch Point Edit**

Stitch point(s) editing function, including move, add, delete, change code type etc.

**Short Stitch Removal**

Automatically remove short stitches (stitches that shorter than a user defined length).

8.1.3.8.8 Stitch Block Edit Toolbar

**Edit Stitch Block(s)**

Change stitch blocks' settings, types, in/out points, guide lines etc.

**Design In/Out Points**

Set the design in/out points manually.

**Convert Manual Stitch Block**

Convert a manual stitch block to internal types, such as fill or satin.

**Stitch Processing**

Perform stitch processing functions such as change size, number of stitches or span.

8.1.3.8.9 Manual Stitch Toolbar

**Manual Stitch**

Create manual stitches.

**Jump Stitch**

Create jump stitches.

8.1.3.8.10 Machine Control Toolbar

**Insert/Remove Trim Code**

Insert a trim code to the stitch block if none is present, otherwise remove it.

**Insert Move Frame Code**

Insert a move frame code in the design.

8.1.3.8.11 OneTouch Toolbar

**OneTouch**

Automatically stitches generation on a background image.

**Reduce Image Color**

Automatically reduce the colors of the image in the active Design Window. If there is no image, this function is disabled.

**Auto Trace**

Auto trace the boundary of a color region of the background image to create an object.

8.1.3.8.12 Slow Redraw Toolbar

**Slow Redraw**

Redraw stitches from the start in various speeds.

**Simulation Slow Redraw**

Redraw stitches from the start in various speeds in 3-D simulation display.

8.1.3.9 Miscellaneous Toolbars

There are some toolbars which will be displayed when certain functions are selected:

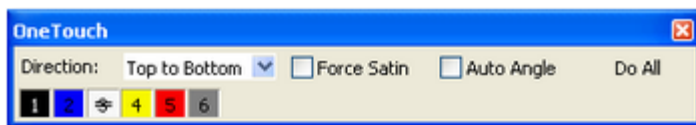
- Short Stitch Removal Bar ^[147]
- OneTouch Bar ^[147]
- Reduce Image Color Bar ^[147]

8.1.3.9.1 Short Stitch Removal Bar



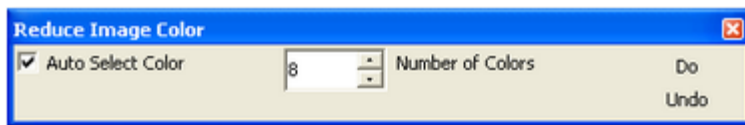
- **Shortest (mm)**
Stitches points spaced shorter than this distance will be considered as 'short' stitches.
- **Do**
Start removing short stitches.
- **Retain Edge Stitches**
If checked, preserve edge stitch points when removing short stitches.

8.1.3.9.2 OneTouch Bar



- **Direction**
The image will be processed according to this direction.
- **Force Satin**
If checked, satin stitch will be created no matter how wide a region is.
- **Auto Angle**
If checked, the program will automatically select an angle for the fill stitch which matches the direction of a region.
- **Do All**
Process the whole image.
- **Colors**
Show all colors in the image. Right-click on a color to change its number or ignore it during processing.

8.1.3.9.3 Reduce Image Color Bar



- **Auto Select Color**
If checked, the program will select colors automatically. Otherwise, click on the image to select/deselect colors.
- **Number of Colors**
Final number of colors after color reduction.
- **Do**
Start color reduction using the current settings.
- **Undo**
Reverse the changes of the last operation.

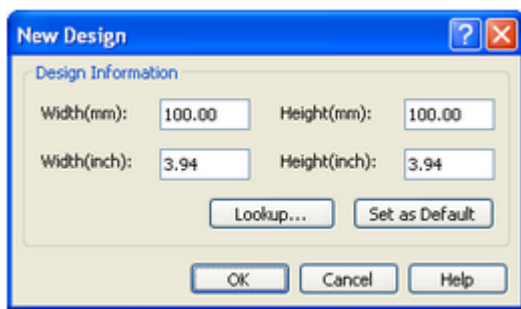
8.1.4 Status Bar



- **Message Bar**
Different types of message are display here, like command help, program status, errors and warnings etc.
- **Size**
Show the size of the current selected stitch blocks.
- **Offset from Design Center**
Show the offset of the current cursor position from the design center.

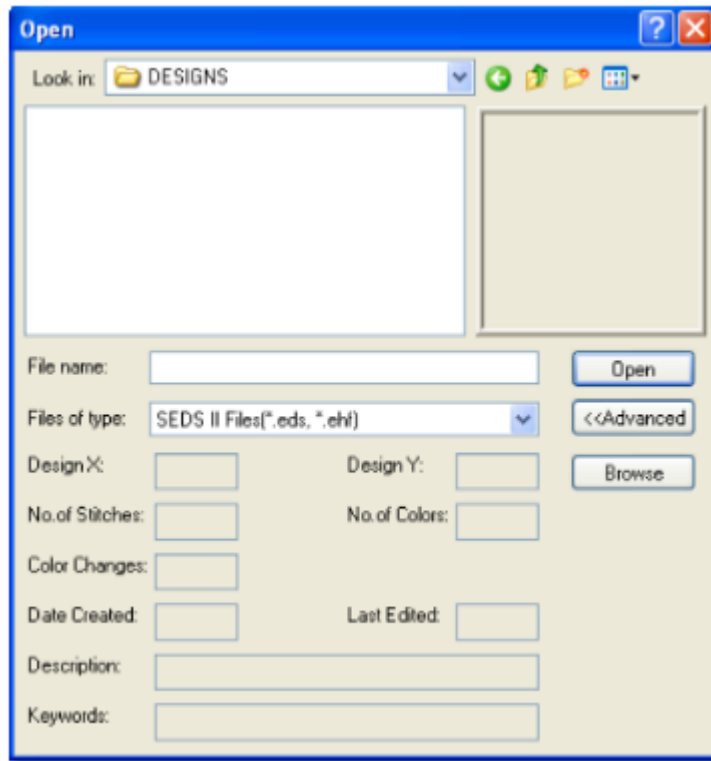
8.1.5 Dialog Boxes

8.1.5.1 New Design Dialog Box



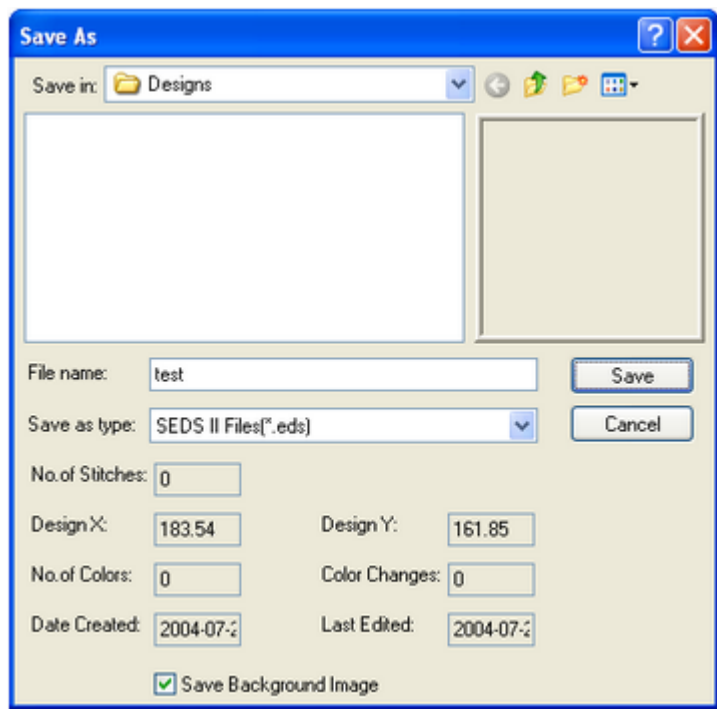
- **Width (mm)**
Width of file in mm.
- **Height (mm)**
Height of file in mm.
- **Width (inch)**
Width of file in inch.
- **Height (inch)**
Height of file in inch.
- **Lookup**
Open the Lookup dialog box for selecting the preset hoop sizes for common machines
- **Set as Default**
Set the current file size values as default values.

8.1.5.2 Open Design Dialog Box



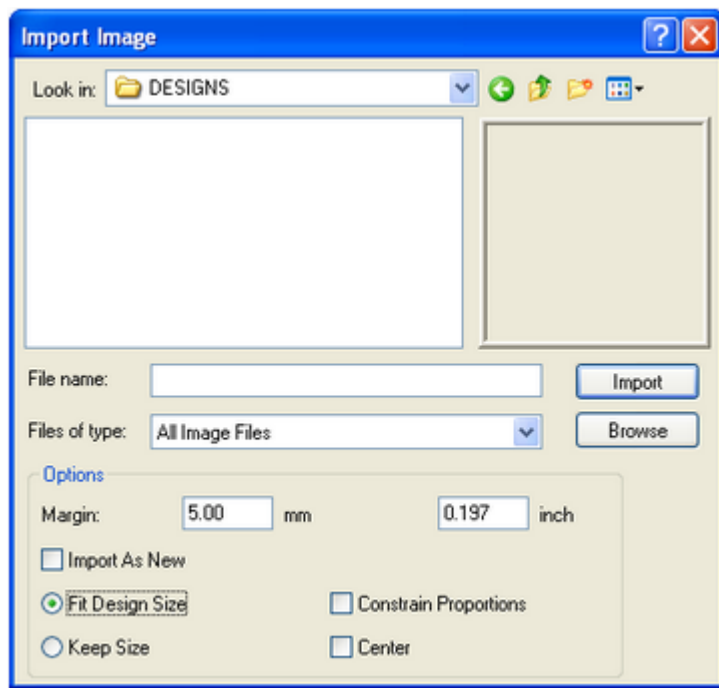
- **File Name**
The name of the design file.
- **Files of Type**
- **Design X**
Design Width in mm.
- **Design Y**
Design Height in mm.
- **Number of Stitches**
Total number of stitches in the design.
- **Number of Colors**
Total number of colors (needles) of the design.
- **Color Changes**
Total number of color (needle) changes in the design.
- **Date Created**
Date the design was created.
- **Last Edited**
Date the design was last edited.
- **Description**
Description about the design.
- **Keywords**
Keywords associated with the design.
- **Advanced**
Display additional properties and/or options.
- **Browse**
Invoke the Designs Browser.

8.1.5.3 Save As Dialog Box



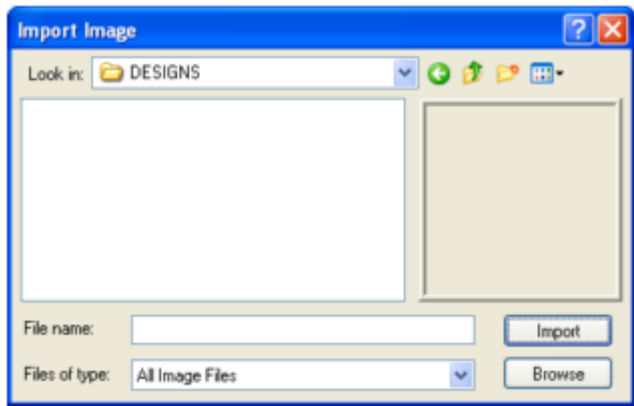
- **File Name**
Input the name of the design you want to save as here.
- **Save as Type**
File type to save.
- **Number of Stitches**
Total number of stitches in the design.
- **Design X**
Design Width in mm.
- **Design Y**
Design Height in mm.
- **Number of Colors**
Total number of colors (needles) of the design.
- **Color Changes**
Total number of color (needle) changes in the design.
- **Date Created**
Date the design was created.
- **Last Edited**
Date the design was last edited.
- **Save Background Image**
Check to save the background image in the design file also.

8.1.5.4 Import Image Dialog Box



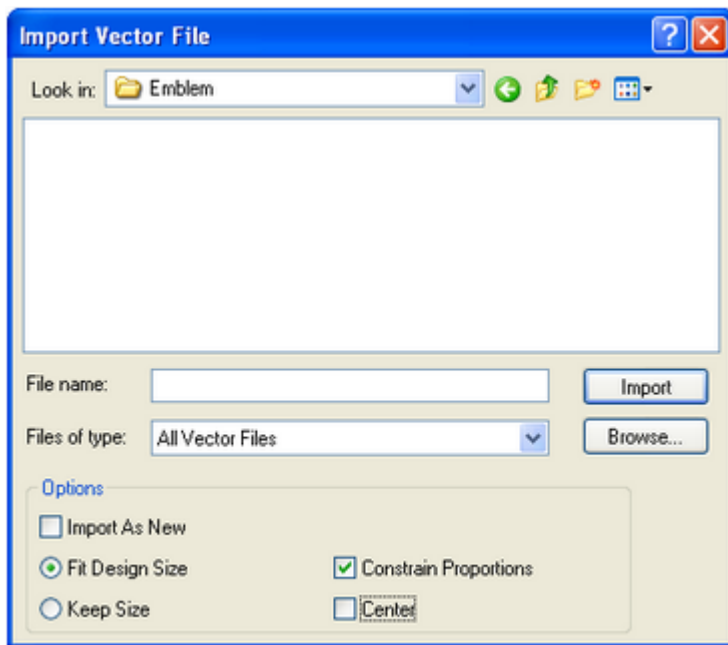
- **File Name**
Input the name of the image file you want to import here.
- **Files of Type**
Available image types : BMP, JPEG, TIFF, PCX, GIF, MSP, RAS, PCT, WMF, EMF, PSD, AWD
- **Browse**
Invoke the Image Files Browser.
- **Margin**
Defines the top, bottom, left and right margins to be added to the image when imported.
- **Import as New**
Import the file into a new Design Window.
- **Fit Design Size**
Scale the file so that it just fit in the Design Window.
- **Constrain Proportions**
Maintain the original aspect ratio if scaling of file is required.
- **Keep Size**
Keep the original size of the size when imported.
- **Center**
Place the imported file in the center of the Design Window.

8.1.5.5 Import Simulation Background Image Dialog Box



- **File Name**
Input the name of the image file you want to import here.
- **Files of Type**
Available image types : BMP, JPEG, TIFF, PCX, GIF, MSP, RAS, PCT, WMF, EMF, PSD, AWD
- **Browse**
Invoke the Image Files Browser.

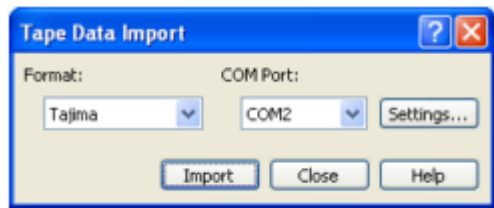
8.1.5.6 Import Vector File Dialog Box



- **File Name**
Input the name of the vector file you want to import here.
- **Files of Type**
Available vector file types : WMF, EMF, PS, EPS
- **Browse**
Invoke the Vector Files Browser.
- **Import as New**
Import the file into a new Design Window.

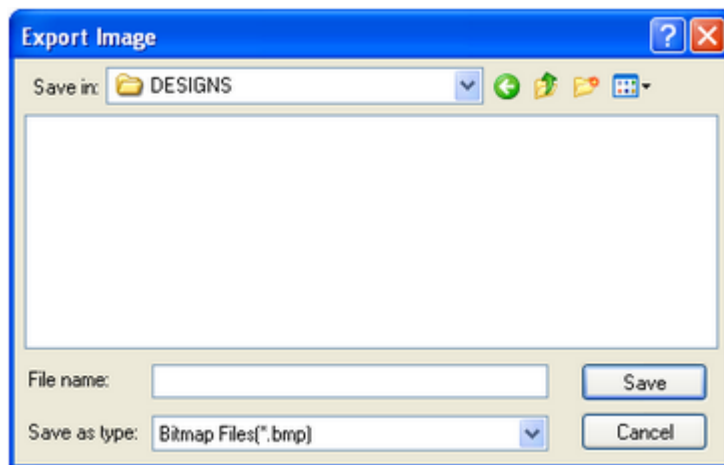
- **Fit Design Size**
Scale the file so that it just fit in the Design Window.
- **Constrain Proportions**
Maintain the original aspect ratio if scaling of file is required.
- **Keep Size**
Keep the original size of the size when imported.
- **Center**
Place the imported file in the center of the Design Window.

8.1.5.7 Import from Tape Dialog Box



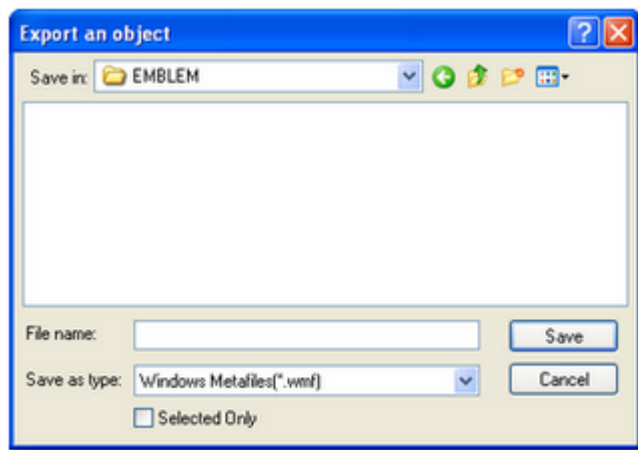
- **Format**
Available formats : Tajima, Barudan, ZSK, Melco Exp
- **Com Port**
Select the com port for output.
- **Settings**
Click this button to change the default com port settings.

8.1.5.8 Export Image Dialog Box



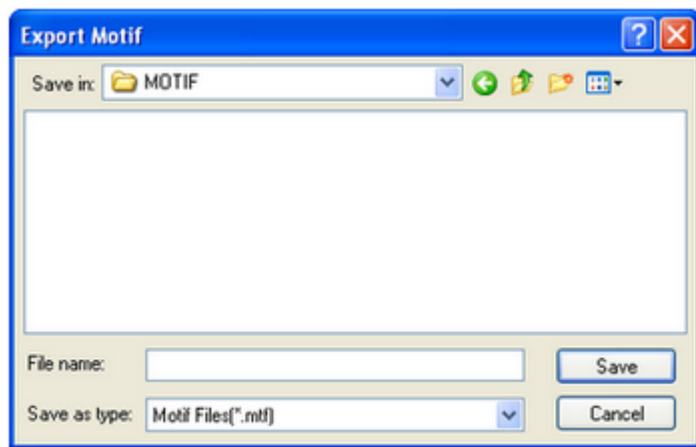
- **File Name**
Input the name of the exported image file here.
- **Files of Type**
Available image types : BMP

8.1.5.9 Export Objects Dialog Box



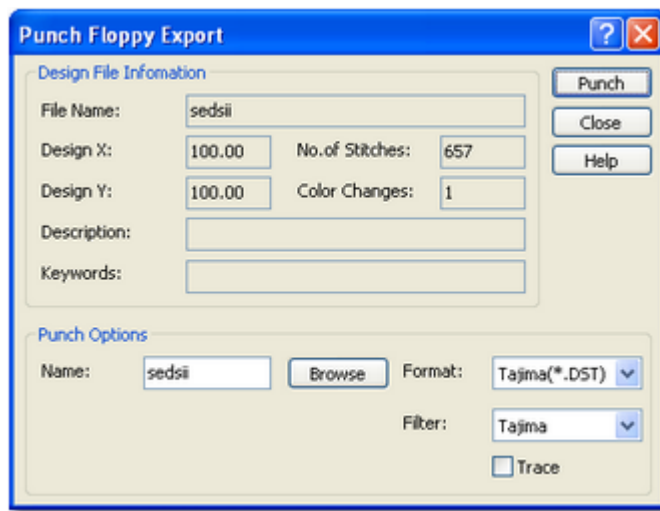
- **File Name**
Input the name of the exported objects file here.
- **Files of Type**
Available vector file types : WMF, DXF
- **Selected Only**
Export selected objects only.

8.1.5.10 Export Motif Dialog Box



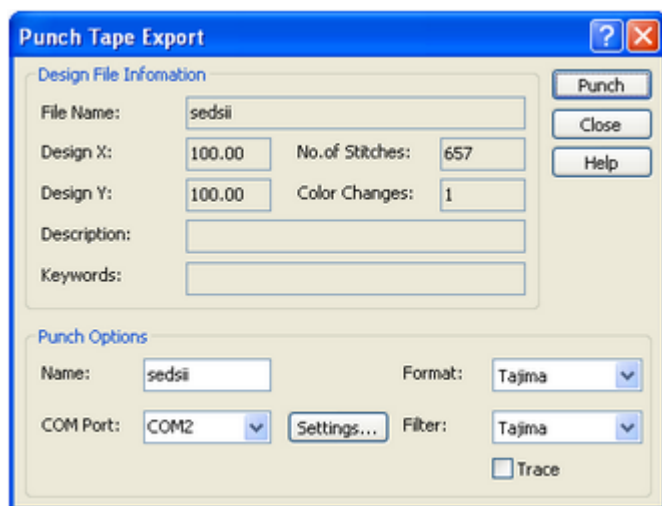
- **File Name**
Input the name of the exported motif file here.
- **Files of Type**
Available vector file types : MTF

8.1.5.11 Punch Floppy Export Dialog Box



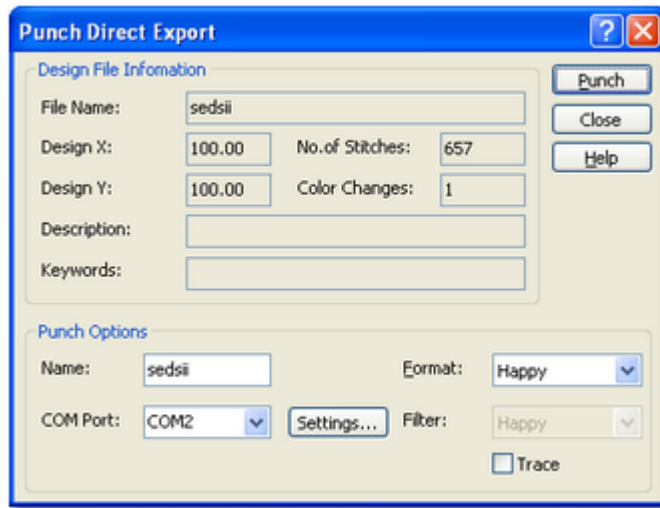
- **File Name**
The name of the design file.
- **Design X**
Design Width in mm.
- **Design Y**
Design Height in mm.
- **Number of Stitches**
Total number of stitches in the design.
- **Color Changes**
Total number of color (needle) changes in the design.
- **Description**
Description about the design.
- **Keywords**
Keywords associated with the design.
- **Name**
Output file name.
- **Browse**
Browse the floppy disk.
- **Format**
Available formats : Tajima DST, Barudan FMC, Barudan FDR, ZSK, Melco Exp (DOS), Melco Exp (Normal), Melco Cnd (DOS), Melco Cnd (Normal), Happy, HUS, SEW, PEC, PES, KSM, PCS, PCM
- **Filter**
Machine code filter.
- **Trace**
Check this box to add jump stitches, which runs along the boundary of the design, at the beginning of the output.

8.1.5.12 Punch Tape Export Dialog Box



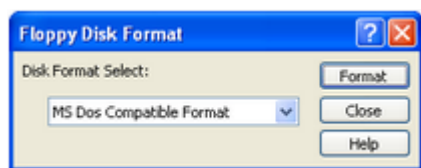
- **File Name**
The name of the design file.
- **Design X**
Design Width in mm.
- **Design Y**
Design Height in mm.
- **Number of Stitches**
Total number of stitches in the design.
- **Color Changes**
Total number of color (needle) changes in the design.
- **Description**
Description about the design.
- **Keywords**
Keywords associated with the design.
- **Name**
Output file name.
- **Format**
Available formats : Tajima, Barudan, ZSK, Melco Exp
- **Filter**
Machine code filter.
- **Trace**
Check this box to add jump stitches, which runs along the boundary of the design, at the beginning of the output.
- **Com Port**
Select the com port for output.
- **Settings**
Click this button to change the default com port settings.

8.1.5.13 Punch Direct Export Dialog Box



- **File Name**
The name of the design file.
- **Design X**
Design Width in mm.
- **Design Y**
Design Height in mm.
- **Number of Stitches**
Total number of stitches in the design.
- **Color Changes**
Total number of color (needle) changes in the design.
- **Description**
Description about the design.
- **Keywords**
Keywords associated with the design.
- **Name**
Output file name.
- **Format**
Available formats : Happy
- **Filter**
Machine code filter.
- **Trace**
Check this box to add jump stitches, which runs along the boundary of the design, at the beginning of the output.
- **Com Port**
Select the com port for output.
- **Settings**
Click this button to change the default com port settings.

8.1.5.14 Floppy Disk Format Dialog Box



■ Disk Format Select

Available format types : MS-DOS Compatible, Tajima, Barudan FMC, Barudan FDR, ZSK, Melco Exp (DOS), Melco Exp (Normal), Melco Cnd (DOS), Melco Cnd (Normal), Happy

8.1.5.15 Normal Print Dialog Box

There are 3 tabs in this dialog box:

- Design Information ^[158]
- Thread Information ^[159]
- Color Sequence ^[160]

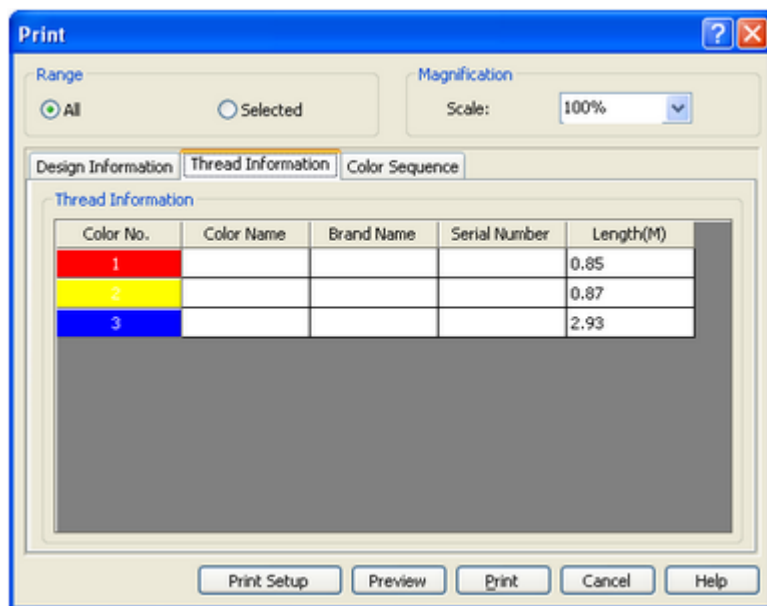
8.1.5.15.1 Design Information

Design Information	
File Name:	Ants
Design Size:	51.80(mm) x 60.60(mm)
Print Scale(%):	100
No.Of Stitches:	2989
No.Of Colors:	3
Color Changes:	2
Thread Consumption:	4.65(M)
Design Number:	
Customer Number:	
Customer Name:	
Job Number:	

- **Range**
Check 'All' to print the whole design or 'Selected' to print the selected stitch blocks.
- **Magnification**
Select from the pull down list a pre-defined print scale or input the scale in the pull down box.
- **File Name**
The name of the design file.
- **Dimensions**
Design width and height in mm.
- **Print Scale**
Output print scale, 100% means actual size.
- **Number of Stitches**
Total number of stitches in the design.
- **Number of Colors**
Total number of colors (needles) of the design.
- **Color Changes**
Total number of color (needle) changes in the design.
- **Thread Consumption**
Estimate total thread consumption in meter.
- **Design Number**
User defined number to specify the design.

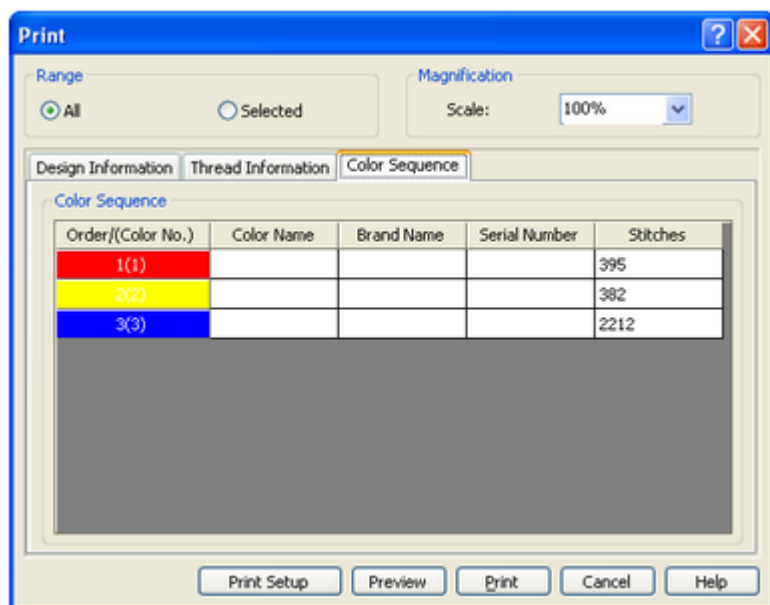
- **Customer Number**
User defined number to specify the customer for the design.
- **Customer Name**
Name of the customer for the design, if any.
- **Job Number**
User defined number to specify the job of the design.
- **Digitizer**
User defined text to specify the digitizer of the design.
- **Description**
Description about the design.
- **Keywords**
Keywords associated with the design.
- **Print Date**
The date the design is printed.

8.1.5.15.2 Thread Information



- **Range**
Check 'All' to print the whole design or 'Selected' to print the selected stitch blocks.
- **Magnification**
Select from the pull down list a pre-defined print scale or input the scale in the pull down box.
- **Thread Information**
Check this box to print the thread information as shown.

8.1.5.15.3 Color Sequence



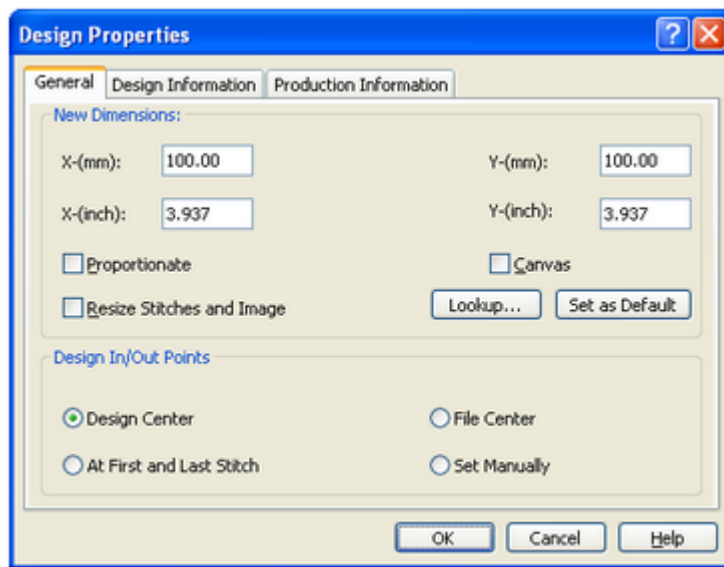
- **Range**
Check 'All' to print the whole design or 'Selected' to print the selected stitch blocks.
- **Magnification**
Select from the pull down list a pre-defined print scale or input the scale in the pull down box.
- **Color Sequence**
Check this box to print the color sequence as shown.

8.1.5.16 Design Properties Dialog Box

There are 3 tabs in this dialog box:

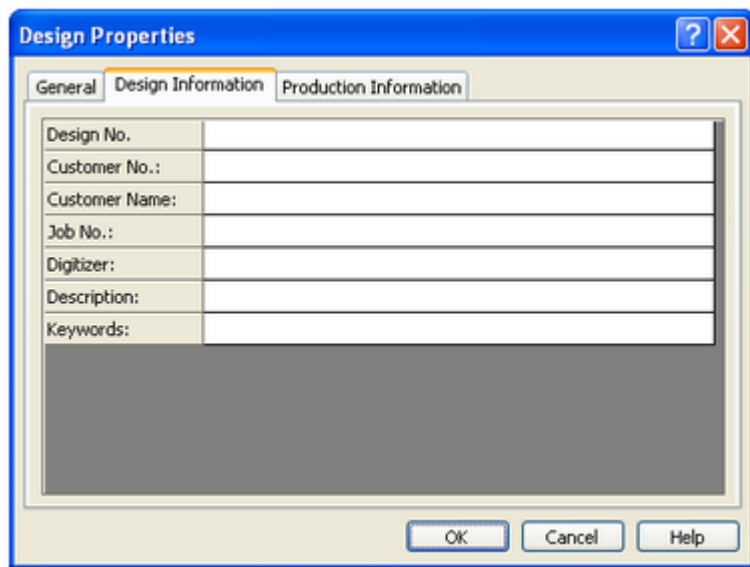
- General ^[161]
- Design Information ^[162]
- Production Information ^[163]

8.1.5.16.1 General



- **New Dimensions**
 - **X-(mm)**
File width of design in mm.
 - **Y-(mm)**
File height of design in mm.
 - **X-(inch)**
File width of design in inch.
 - **Y-(inch)**
File height of design in inch.
 - **Proportionate**
If enabled, maintain the original aspect ratio when width or height is changed.
 - **Canvas**
If checked, just the file size of the design will be changed and the contents of the design will be placed at the center of the new file area.
 - **Resize Stitches and Image**
If checked, the contents of the design will be scaled according to the new file size. This is ignored if Canvas is checked.
 - **Lookup**
Open the Lookup dialog box for selecting the preset hoop sizes for common machines
 - **Set as Default**
Set the current file size values as default values.
- **Design start/end point**
 - **Design Center**
Design start/end points will be placed at the center of the design.
 - **File Center**
Design start/end points will be placed at the center of the file area.
 - **At First and Last Stitch**
Design start point will be the first stitch point in the design and end point will be the last stitch point.
 - **Set Manually**
Design start/end points are user defined.

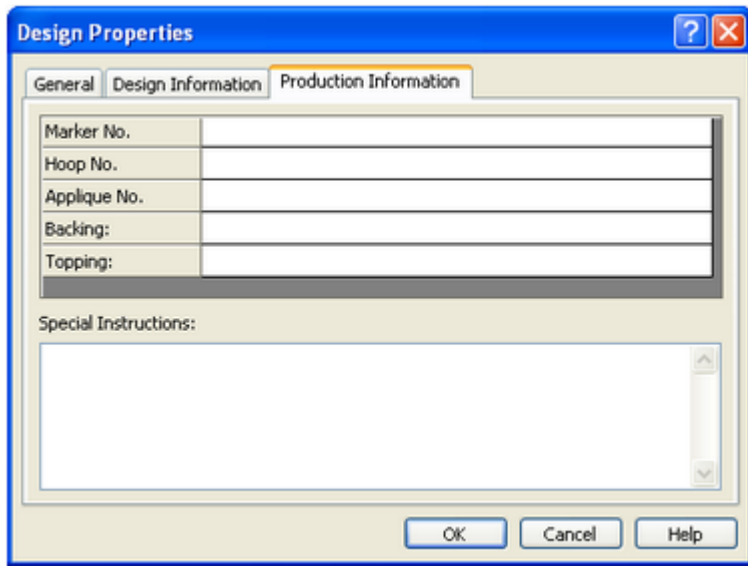
8.1.5.16.2 Design Information

The image shows a 'Design Properties' dialog box with a blue title bar and standard Windows window controls. It has three tabs: 'General', 'Design Information' (which is selected), and 'Production Information'. The 'Design Information' tab contains a table with seven rows for inputting design details. Below the table is a large text area for a description. At the bottom are 'OK', 'Cancel', and 'Help' buttons.

Design No.	
Customer No.:	
Customer Name:	
Job No.:	
Digitizer:	
Description:	
Keywords:	

- **Design Number**
User defined number to specify the design.
- **Customer Number**
User defined number to specify the customer for the design.
- **Customer Name**
Name of the customer for the design, if any.
- **Job Number**
User defined number to specify the job of the design.
- **Digitizer**
User defined text to specify the digitizer of the design.
- **Description**
Description about the design.
- **Keywords**
Keywords associated with the design.

8.1.5.16.3 Production Information



The image shows a Windows-style dialog box titled "Design Properties". It has three tabs: "General", "Design Information", and "Production Information", with the latter being the active tab. The dialog contains several input fields: "Marker No.", "Hoop No.", "Applique No.", "Backing:", and "Topping:". Below these is a larger text area labeled "Special Instructions:". At the bottom right are three buttons: "OK", "Cancel", and "Help".

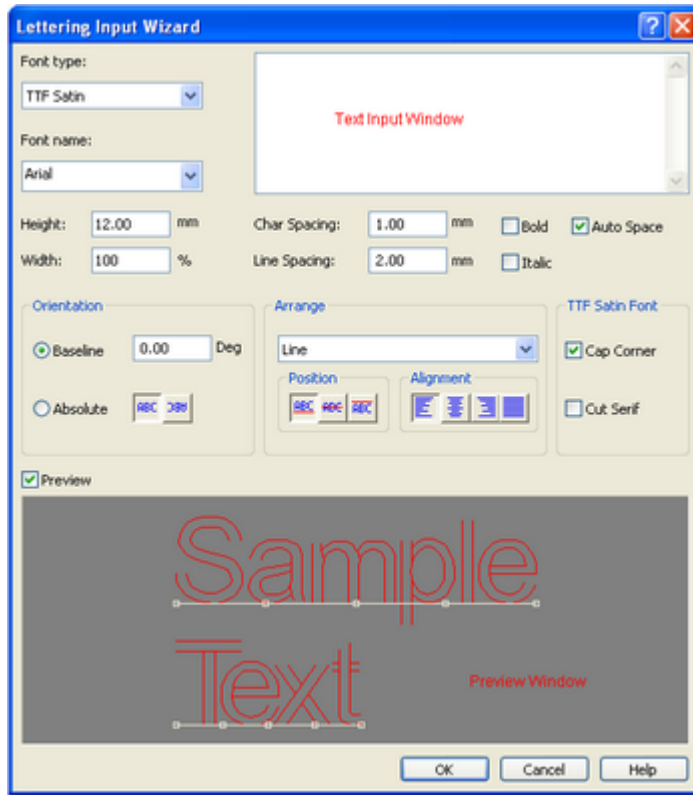
Marker No.	
Hoop No.	
Applique No.	
Backing:	
Topping:	

Special Instructions:

OK Cancel Help

- **Marker No.**
User defined number to specify the marker used.
- **Hoop No.**
User defined number to specify the hoop used.
- **Appliqué No.**
User defined number to specify the appliqué used.
- **Backing**
User defined text to specify the backing used.
- **Topping**
User defined text to specify the topping used.

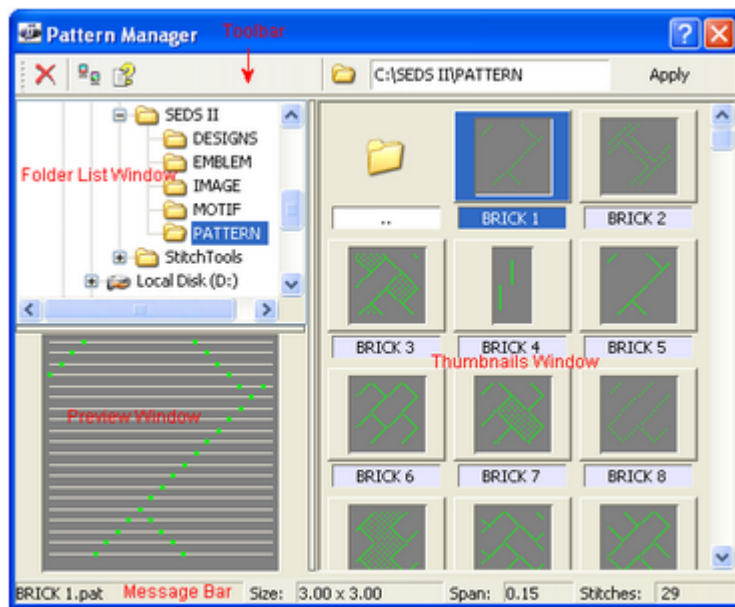
8.1.5.17 Lettering Input Wizard Dialog Box



- **Font Type**
Four types, TTF Fill, TTF Satin, SEDS Fill and SEDS Satin are available. The SEDS types are pre-digitized font types.
- **Font Name**
The name of the font.
- **Character Height**
Height of characters in mm. Typically this gives the height of the capital letter 'A'.
- **Character Width**
Width of character in percentage of the width proportional to the character height.
- **Character Space**
Space between characters in mm.
- **Line Space**
Space between lines in mm.
- **Bold**
Create text in bold mode, supported in TTF fonts only.
- **Italic**
Create text in italic mode, supported in TTF fonts only.
- **Auto Spacing**
If checked, turn on adjust spacing between characters automatically, off otherwise.
- **Baseline**
If selected, characters will be rotated at the given angle relative to the baseline.
- **Absolute**
If selected, characters will be rotated at the given angle relative to the horizontal line.
- **Arrange**
Select the type of baseline (Line, Vertical Line, Arc, Ellipse, Free Lines) or envelope (Box, 2 Lines, Diamond, 2 Free Lines) to be used for the text.

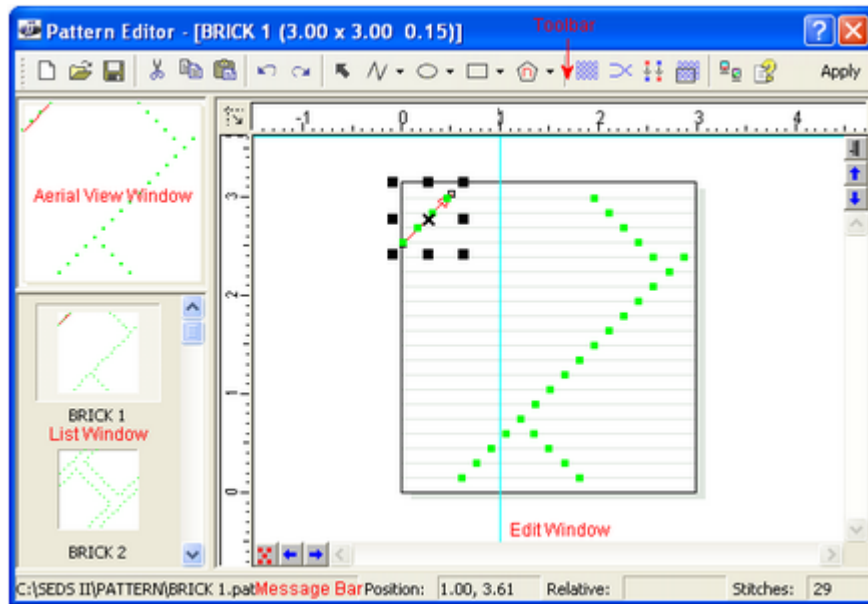
- **Position**
Select to place text on, in middle of, or below the object.
- **Alignment**
Select alignment of text to left, center, right or all.
- **Cap Corner**
If checked, cap type cornering will be used for TTF satin font.
- **Cut Serif**
If checked, for TTF satin font with serifs, the serifs will be cut separately.
- **Preview**
If checked, a preview of the current selected options will be shown.

8.1.5.18 Pattern Browser Dialog Box



- **Toolbar**
 - Delete Item**
Delete the current selected item.
 - Switch to Editor**
Open the editor to edit the current selected item or create a new one.
 - Help**
Display the online help.
- **Folder List Window**
Here you can select the folder where patterns are located.
- **Preview Window**
A scaled preview of the selected pattern will be shown here.
- **Thumbnails Window**
Patterns will be shown as thumbnails here. Click on a thumbnail will select it and its properties will be shown on the Message Bar. Also the selected pattern will be scaled to fit in the Preview Window.
- **Message Bar**
 - Pattern Name
 - Pattern Size - width x height in mm
 - Pattern span in mm
 - Total number of stitches in the pattern

8.1.5.19 Pattern Editor Dialog Box



- **Toolbar**

**New**

Create a new item.

**Select Folder**

Select the folder where items are stored.

**Save**

Save the current item.

**Cut**

Delete the current selected entities and place them into the clipboard.

**Copy**

Copy the current selected entities into the clipboard.

**Paste**

Place the entities in the clipboard into the current item.

**Undo**

Reverse the changes of the last operation.

**Redo**Reverse the changes of the last **Undo**.**Selection**

Entities selection tool.

Line Toolbar ^[144]Ellipse Toolbar ^[144]Rectangle Toolbar ^[145]Polygon/Star Toolbar ^[145]**Generate Points**

Generates pattern points from selected objects.

**Shift Pattern**

Click a point in the pattern window to shift the origin to this point.

**Add/Delete Points**

Click on an existing pattern point to delete and an empty space to add a pattern point.

**Move Points**

Click on a pattern points to select and shift-click to select multiple points. Drag on any one of the selected points to move.

-  **Switch to Browser**
Switch to item browser.
-  **Help**
Display the online help.

- **Aerial View Window**

The whole pattern is scaled to display in this window. You can zoom in an area of interest by drawing a rectangle over the region. The area thus selected will be highlighted in a gray rectangle.

- **List Window**

Thumbnails of all patterns in the current pattern folder will be shown here. Click on a pattern to select it for editing.

- **Edit Window**

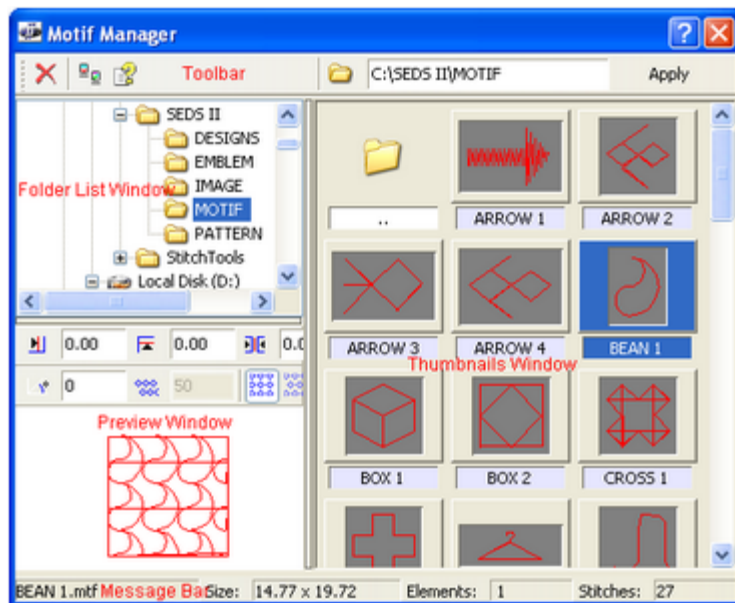
This is where you perform editing functions on the pattern.

-  **Tile Display**
Display the pattern in tiles.
-  **Show Ruler**
On/Off. Turn on/off ruler display.
-  **Shift Left**
Shift the whole pattern to the left.
-  **Shift Right**
Shift the whole pattern to the right.
-  **Shift Up**
Shift the whole pattern to the up.
-  **Shift Down**
Shift the whole pattern to the down.

- **Message Bar**

- Pattern Name
- Absolute coordinates from the lower left corner in mm
- Relative coordinates from first point when drawing objects.
- Total number of stitches in the pattern

8.1.5.20 Motif Browser Dialog Box



- **Toolbar**

-  **Delete Item**
Delete the current selected item.
-  **Switch to Editor**
Open the editor to edit the current selected item or create a new one.

**Help**

Display the online help.

- **Folder List Window**

Here you can select the folder where motifs are located.

- **Preview Window**

Motif will be filled according the settings below and shown here.

**Parallel Offset**

Adjust this to shift motifs in the direction of a motif line.

**Perpendicular Offset**

Adjust this to shift motifs in the direction perpendicular to the motif line.

**Motif Gap**

Distance between motifs in mm.

**Perpendicular Gap**

Perpendicular distance between motif lines in mm.

**Angle**

Angle of stitch lines.

**Displacement**

Motifs are shifted by percentage of the width of a motif from the previous row.

**Align Normal**

Motifs are aligned at the same position on each row.

**Align Interlace**

Motifs are shifted by half the width of the motif each row.

**Align Overlap**

Motifs are shifted by half the width of the motif each row and the distance between rows is decreased by half the height of the motif.

**Align Free**

Motifs are shifted by a percentage of the width of the motif each row.

**Preview Size**

Set the size of the preview rectangle.

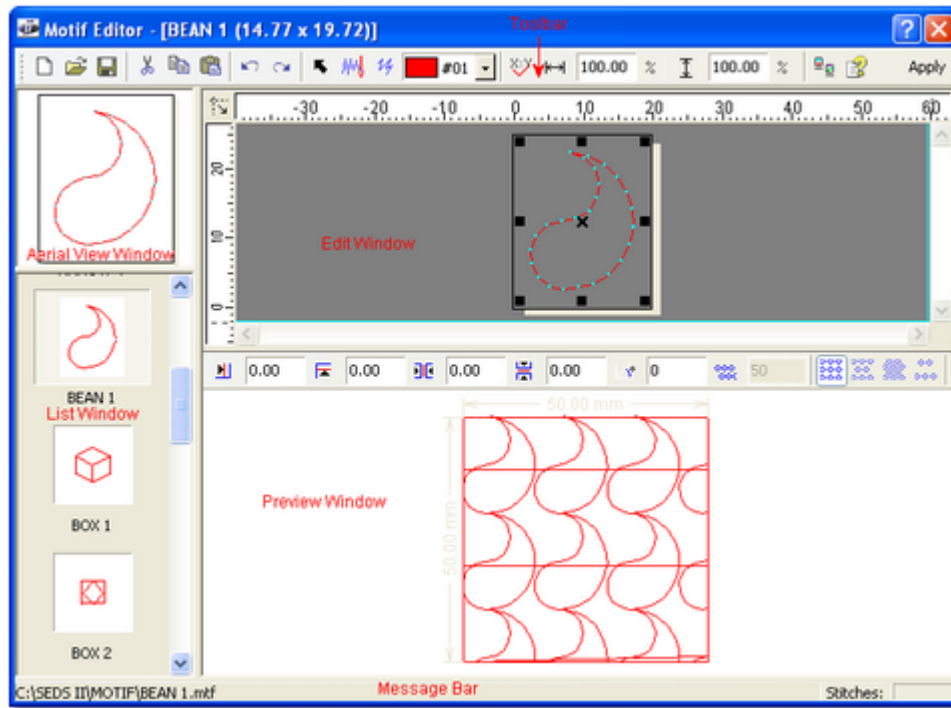
- **Thumbnails Window**

Motifs will be shown as thumbnails here. Click on a thumbnail will select it and its properties will be shown on the Message Bar. Also the selected motif will be filled and shown in the Preview Window.

- **Message Bar**

- Motif Name
- Motif Size - width x height in mm
- Number of stitch blocks in the motif
- Total number of stitches in the motif

8.1.5.21 Motif Editor Dialog Box



- **Toolbar**

-  **New**
Create a new item.
-  **Select Folder**
Select the folder where items are stored.
-  **Save**
Save the current item.
-  **Cut**
Delete the current selected entities and place them into the clipboard.
-  **Copy**
Copy the current selected entities into the clipboard.
-  **Paste**
Place the entities in the clipboard into the current item.
-  **Undo**
Reverse the changes of the last operation.
-  **Redo**
Reverse the changes of the last **Undo**.
-  **Selection**
Entities selection tool.
-  **Add Stitch Blocks**
Add manual stitch blocks to the motif.
-  **Edit Points**
Perform points editing function like, insert, delete move etc.
- **Color List**
Select a color for a stitch block from here.
-  **Proportionate**
If enabled, maintain the original aspect ratio when width or height is changed.
-  **Motif Width**
Width of the motif, in mm or percentage of original.
-  **Motif Height**
Height of the motif, in mm or percentage of original.

- **Unit**

Unit in mm or percentage of the original value.



- **Switch to Browser**

Switch to item browser.



- **Help**

Display the online help.

- **Aerial View Window**

The whole motif is scaled to display in this window. You can zoom in an area of interest by drawing a rectangle over the region. The area thus selected will be highlighted in a gray rectangle.

- **List Window**

Thumbnails of all motifs in the current motif folder will be shown here. Click on a motif to select it for editing.

- **Edit Window**

This is where you perform editing functions on the motif.

- **Preview Window**

Motif will be filled according the settings below and shown here.



- **Parallel Offset**

Adjust this to shift motifs in the direction of a motif line.



- **Perpendicular Offset**

Adjust this to shift motifs in the direction perpendicular to the motif line.



- **Motif Gap**

Distance between motifs in mm.



- **Perpendicular Gap**

Perpendicular distance between motif lines in mm.



- **Angle**

Angle of stitch lines.



- **Displacement**

Motifs are shifted by percentage of the width of a motif from the previous row.



- **Align Normal**

Motifs are aligned at the same position on each row.



- **Align Interlace**

Motifs are shifted by half the width of the motif each row.



- **Align Overlap**

Motifs are shifted by half the width of the motif each row and the distance between rows is decreased by half the height of the motif.



- **Align Free**

Motifs are shifted by a percentage of the width of the motif each row.



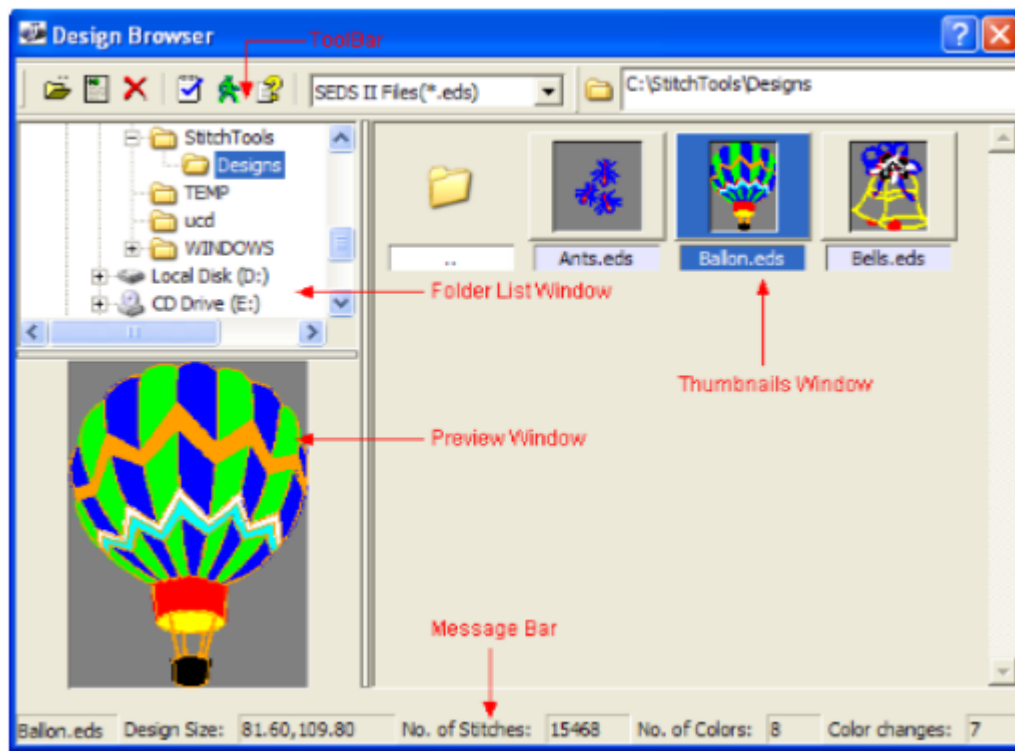
- **Preview Size**

Set the size of the preview rectangle.

- **Message Bar**

- Motif Name
- Total number of stitches in the motif

8.1.5.22 Design Browser Dialog Box



- **Toolbar**



- **Open File**

- Open the selected design file without exiting the Designs Browser dialog box.



- **File Properties**

- Display the properties of a EDS, EDF or EDP design file.



- **Delete File**

- Delete the selected design file.



- **Select**

- Open the selected file and exit the Browser dialog box.



- **Exit**

- Exit the Browser dialog box.



- **Help**

- Display the online help.



- **Design File Type**

- Select the type of design files to be displayed. Only DOS types including EDS, EDF, EDP, DST, CND, EXP, CND, EXP, TAP, PEC, PES, PCS, PCM, KSM, HUS and SEW are supported.



- **Current Folder**

- The current folder is show here. You can type in a new folder name and change to that folder also.

- **Folder List Window**

- Here you can select the folder where design files are located.

- **Preview Window**

- A scaled preview of the selected design will be shown here.

- **Thumbnails Window**

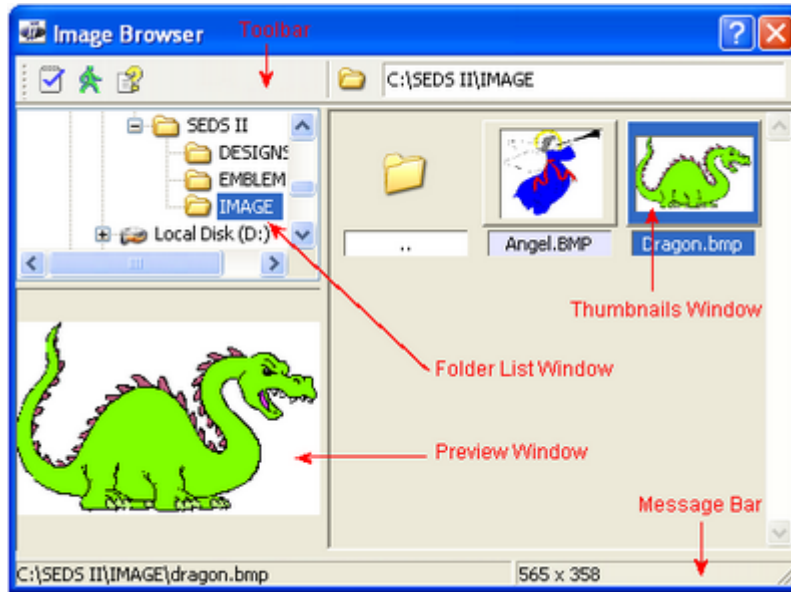
- Designs of the selected type will be shown as thumbnails here. Click on a thumbnail will select it and its properties will be shown on the Message Bar. Also the selected design will be scaled to fit in the Preview Window. Double click on a thumbnail will open the design and exit the Designs Browser dialog box.

- **Message Bar**

- Design Name
 - Design Size - design width x design height in mm or inch
 - No. of Stitches - total number of stitches in design

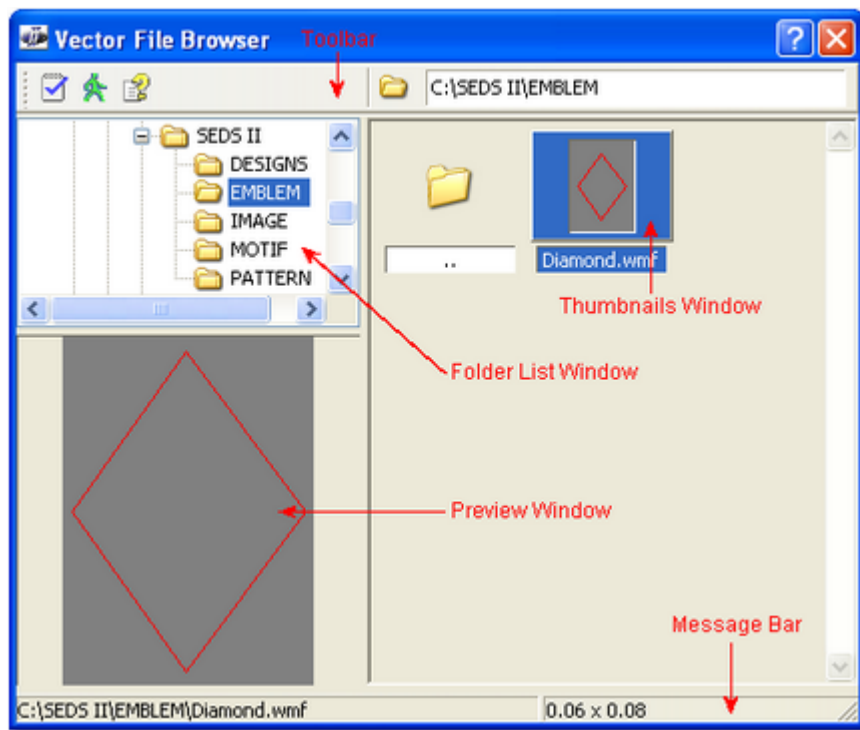
- No. of Colors - total number of colors in design
- Color changes - total number of color (needle) changes in design

8.1.5.23 Image Browser Dialog Box



- **Toolbar**
 -  **Select**
Open the selected file and exit the Browser dialog box.
 -  **Exit**
Exit the Browser dialog box.
 -  **Help**
Display the online help.
- **Folder List Window**
Here you can select the folder where image files are located.
- **Preview Window**
A scaled preview of the selected image will be shown here.
- **Thumbnails Window**
Images will be shown as thumbnails here. Click on a thumbnail will select it and its properties will be shown on the Message Bar. Also the selected image will be scaled to fit in the Preview Window. Double click on a thumbnail will open the image and exit the Image Browser dialog box.
- **Message Bar**
 - Image Name
 - Image Size - width x height in pixels

8.1.5.24 Vector File Browser Dialog Box



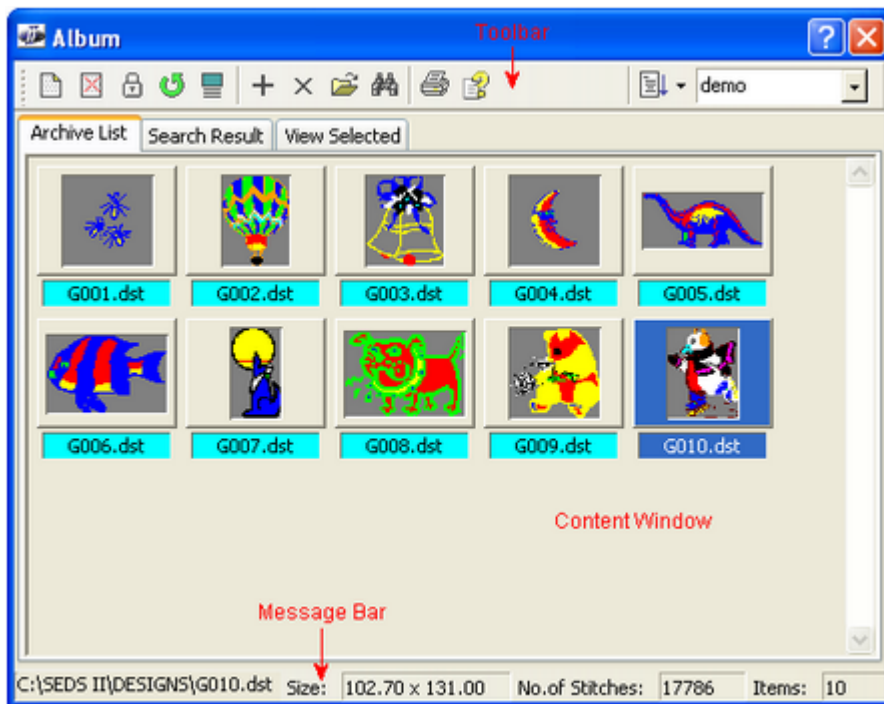
- **Toolbar**
 -  **Select**
Open the selected file and exit the Browser dialog box.
 -  **Exit**
Exit the Browser dialog box.
 -  **Help**
Display the online help.
- **Folder List Window**
Here you can select the folder where vector files are located.
- **Preview Window**
A scaled preview of the selected vector file will be shown here.
- **Thumbnails Window**
Vector files will be shown as thumbnails here. Click on a thumbnail will select it and its properties will be shown on the Message Bar. Also the selected vector file will be scaled to fit in the Preview Window. Double click on a thumbnail will open the vector file and exit the Vector File Browser dialog box.
- **Message Bar**
 - Vector File Name
 - Vector File Size - width x height in mm or inch

8.1.5.25 Edit Machine Code Filter Dialog Box



- **Filter**
Select an existing filter to edit.
- **New**
Create a new filter.
- **Delete**
Delete an existing filter.
- **From**
Select a machine code to change.
- **To**
Input the code sequences to replace the code in From.

8.1.5.26 Album Dialog Box



- **Toolbar**



- **New Album**

- Create a new album.

- (refer to Create a New Album ²⁵¹ for more details)

**Delete Album**

Delete the current album.
(refer to Delete an Album | 26 | for more details)

**Lock/Unlock**

Lock/Unlock an album. You cannot modify the contents of an album if it is locked.
(refer to Lock/Unlock an Album | 26 | for more details)

**Refresh**

Refresh the contents in the current album. Some operations will not refresh contents automatically and you may need to refresh it manually.

**Normal/Compact Mode**

Toggle between Normal and Compact view modes.
(refer to View Design Information | 27 | for more details)

**Add Item**

Add a design to the current album.
(refer to Add a Design to Album | 27 | for more details)

**Delete Item**

Delete a design from the current album.
(refer to Delete a Design from Album | 28 | for more details)

**Open**

Open the selected design to a Design Window.
(refer to Open a Design from Album | 28 | for more details)

**Search Items**

Search for designs in the current album.
(refer to Search Designs in Album | 28 | for more details)

**Print**

Print out designs in the current album.
(refer to Print Designs in Album | 29 | for more details)

**Help**

Display the online help.

**Album List**

Show the list of available albums for selection.

- **Content Window**

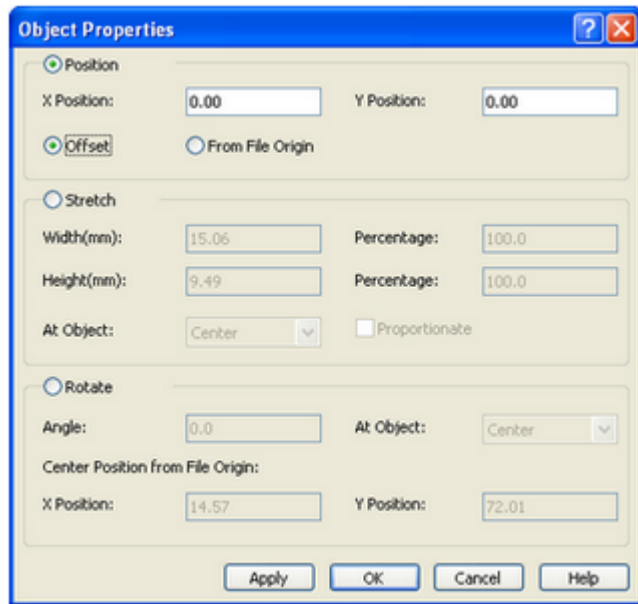
- Archive List
Show all designs in the current album (refer to View all Designs | 26 | for more details).
- Search Result
Show search result (refer to View Search Result | 26 | for more details).
- View Selected
Show the selected design (refer to View the Selected Design | 26 | for more details).

- **Message Bar**

- Path - Full path of the selected design file.
- Size - Width x Height of the selected design file in mm.
- No. of Stitches - Total number of stitches in the selected design file.
- Items - Total number of design files in the current view.

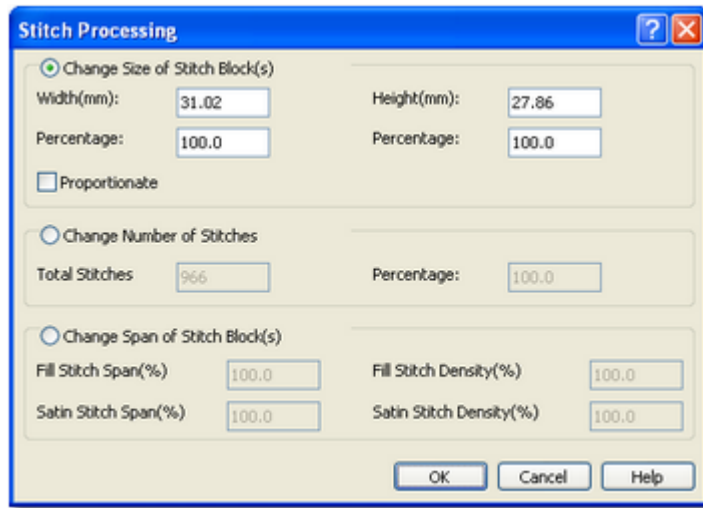
Note that you can adjust the size of the Album Dialog Box by dragging on one of its corners. Contents will be rearranged or re-sized to fit the newly sized window.

8.1.5.27 Object Properties Dialog Box



- **Position** - for moving the objects
 - X Position - horizontal distance in mm or inch relative to the "origin", positive value to the right and negative value to the left.
 - Y Position - vertical distance in mm or inch relative to the "origin", positive value up and negative value down.
 - Offset - "origin" at lower left corner of objects.
 - From File Origin - "origin" at lower left corner of the file.
- **Stretch** - for re-sizing the objects
 - Width - new width in mm or inch, or percentage of the old value.
 - Height - new height in mm or inch, or percentage of the old value.
 - At Object - defines the anchor (the point that is not moved) when re-sizing.
 - Proportionate - maintain the original aspect ratio.
- **Rotate** - for rotating objects
 - Angle - angle of rotation.
 - At Object - center of rotation.
 - Center Position from File Origin - when "User defined" is selected for "At Object", X Position and Y Position define the horizontal and vertical distances of the rotation center from the file origin respectively.

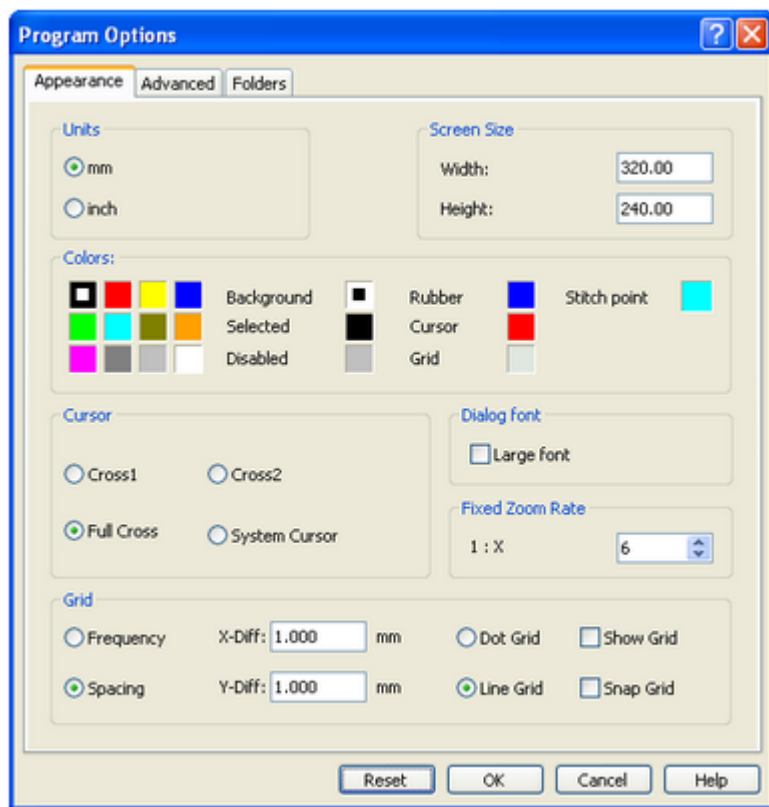
8.1.5.28 Stitch Processing Dialog Box



- **Change Size of Stitch Block(s)**
 - Width - new width of the stitch block(s), in mm or percentage of the old value.
 - Height - new height of the stitch block(s), in mm or percentage of the old value.
 - Proportionate - check to maintain the original aspect ratio.
- **Change Number of Stitches**
 - Total Stitches - new number of stitches, or percentage of the old value.
- **Change Span of Stitches**
 - Fill Stitch Span - span of fill stitch block(s), in percentage of the old value.
 - Fill Stitch Density - density of fill stitch block(s), in percentage of the old value.
 - Satin Stitch Span - span of satin stitch block(s), in percentage of the old value.
 - Satin Stitch Density - density of satin stitch block(s), in percentage of the old value.

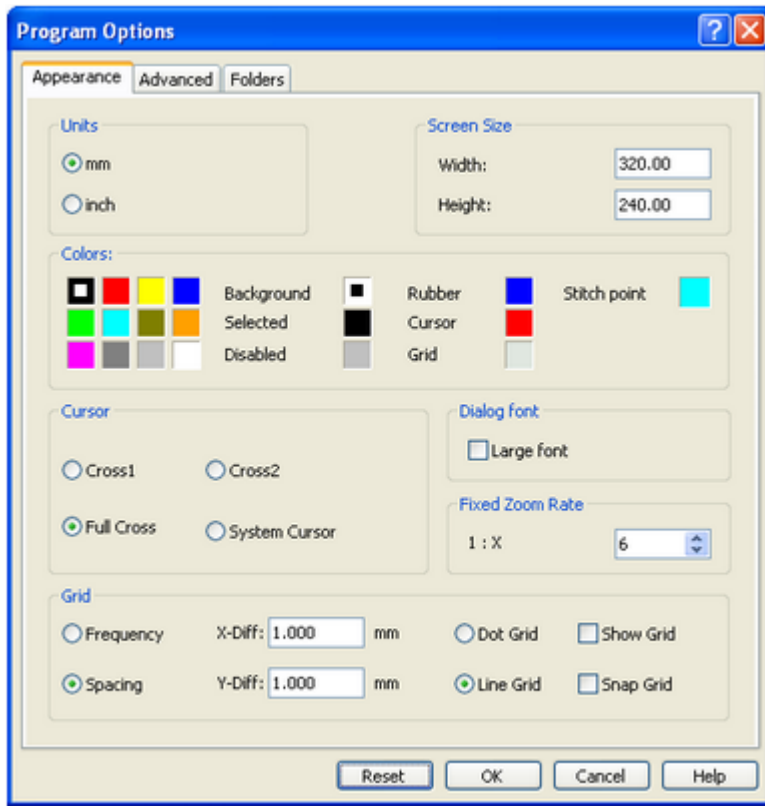
8.2 Program Options

To access program related options, select **Options** from the Tools Menu . The Program Options dialog box will be shown as below:



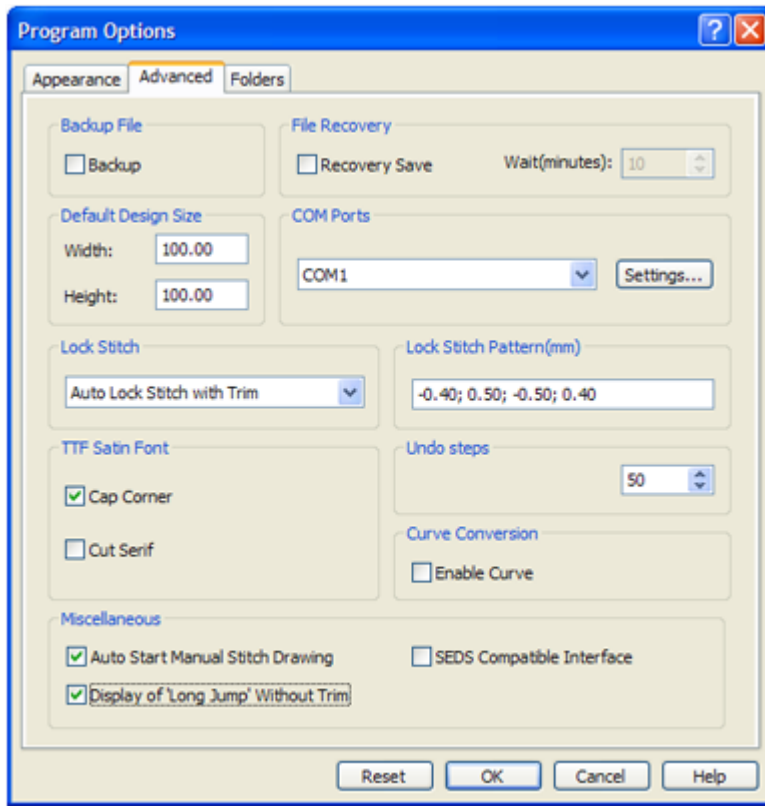
- Appearance ^[179]
- Advanced ^[180]
- Folders ^[181]

8.2.1 Appearance



- **Units**
Either in mm or inch.
- **Screen Size**
The size of your monitor screen. This is used for calculation in zooming to actual size. Always in 4:3 ratio.
- **Colors**
12 user definable colors are shown on the left side. Double click on the colors to change palette. To change a system color, click on it to select it (denoted by a small square at the center) and then click on one of the 12 colors. Click 'Default' to restore to system default colors.
- **Cursor**
4 cursor display mode, cross1(+), cross2(x), full cross and system are available.
- **Dialog Font**
Check "Large Font" to use large font size in dialog boxes.
- **Grid**
 - **Frequency** - Define grid by the number of grid lines per mm/inch given in **X-Diff** and **Y-Diff**. **X-Diff** denotes the number of grid lines in the horizontal direction while **Y-Diff** denotes the number of grid lines in the vertical direction.
 - **Spacing** - Define grid by the spacing between lines given in **X-Diff** and **Y-Diff**. **X-Diff** denotes the spacing of grid lines in the horizontal direction while **Y-Diff** denotes the spacing of grid lines in the vertical direction.
 - **Dot Grid** - Display grid as dots.
 - **Line Grid** - Display grid as lines.
 - **Show Grid** - Turn grid on if checked.
 - **Snap Grid** - Objects will be snapped to grid points if checked.

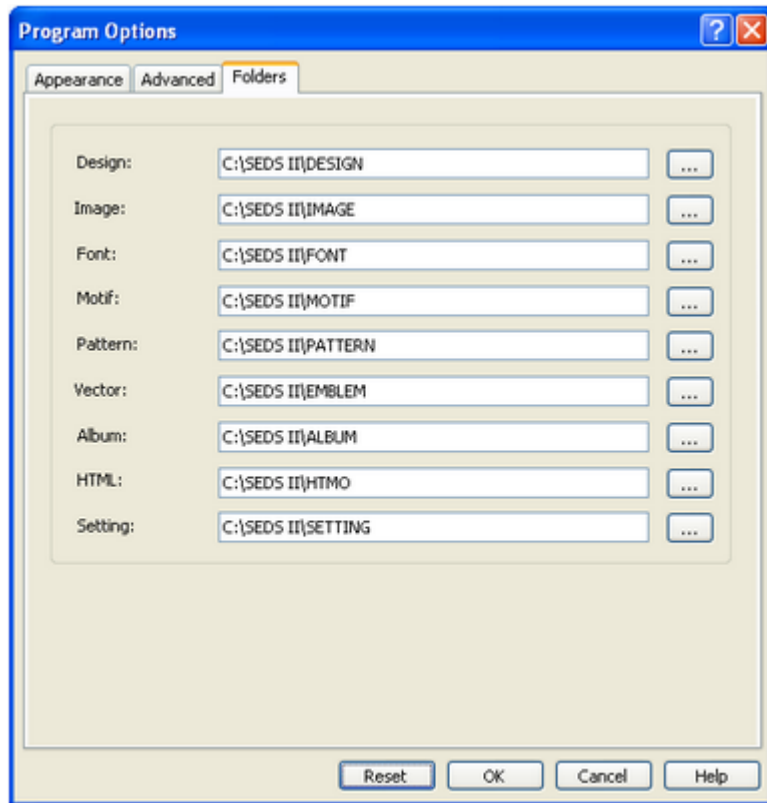
8.2.2 Advanced



- **Backup File**
A backup file with the ".bak" extension will be created when saving if checked.
- **File Recovery**
If "Recovery Save" checked, a backup copy will be created for every n minutes given in "Wait(minutes)". In case of abnormal termination of the program, user will have the option to restore the last backup copy when program restarts.
- **Default Design Size**
The default size set when creating a new design.
- **Com Port**
Select the com port for output.
- **Settings**
Click this button to change the default com port settings.
- **Lock Stitch**
Select options for Lock Stitch.
- **Lock Stitch Pattern**
Input the lock stitch pattern here. Negative values means stitch background in the direction of the last stitch. Positive values means stitch forward in the direction of the last stitch. You can enter more than one values for lock stitch pattern and the values should be separated by commas.
- **TTF Satin Font**
For TrueType Satin fonts, check "Cap Corner" to use Cap Cornering options when generating stitches. Check "Cut Serif" to have serifs generated as separated stitch blocks.
- **Undo Steps**
Specify the number of undo steps that the program will store. Note that the program may run more slowly if this value is set too high.
- **Curve Conversion**
Objects will be convert to curves after transformation operations, such as rotation, cut, merge where appropriate if this option is checked. Otherwise, they will be converted to polylines.
- **Auto Start Manual Stitch Drawing**
If checked, the program will start Manual Stitch automatically after stitch creation.

- **Display of 'Long Jump' without Trim**
If checked, long jump lines will be displayed always, otherwise only if there are preceding trim codes.
- **SEDS Compatible Interface**
Some of the user interface, like hotkeys and right-click button usage will be compatible to previous SEDS versions.

8.2.3 Folders



- Design - default and current folder for design files
- Image - default and current folder for image files
- Font - default and current folder for font files
- Motif - default and current folder for motif files
- Pattern - default and current folder for pattern files
- Vector - default and current folder for vector files
- Album - default and current folder for album files
- HTML - default and current folder for HTML files
- Setting - default and current folder for setting files

Click on the "..." button next to each folder to browse and select a new folder, or type in a new folder name directly. Note that the folders will be updated automatically when you open that file type in the program.

9 Appendix

9.1 End User License Agreement

Notice -- Please read this license agreement carefully before installing the software. If you do not agree to any of these terms, we are unwilling to license this software to you, and you should not install this software. In such case, immediately return the whole software package along with proof of payment.

1. **GRANT OF LICENSE.** This is a grant of license only, and NOT an agreement for sale. This license allows you, the Licensee, to use the software program to be installed on a single computer, with the provided security device. The software is considered to be

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2. **TRANSFER OF LICENSE.** The software shall not be sold, leased, or distributed in whole or in part except provided that (i) the software is transferred in whole with its license, operation manual, and any accompanying material and necessary hardware; (ii) advance written approval of Licensor is obtained. (iii) all required fees must be paid in advance. Such transfer terminates the license of the original Licensee. The transferee must agree in writing to be licensed under the terms of this agreement. Under no circumstance that a software without proper license be supported in any form.
3. **SOFTWARE UPDATE.** The Licensee is entitled to free updates, if any, within the current version at the time of sale, for a period of twelve (12) months after original purchase of the software. Updates are defined as system maintenance, if any, and should not be confused with Software Upgrades. Upgrades are releases of New Software Version which contain system feature or configuration changes. The Licensee has the option of purchasing Upgrade(s).
4. **TECHNICAL SUPPORT** (For Systems sold directly by Licensor to Licensee). The Licensee, who purchased a brand new software package directly from Licensor, is entitled to seek technical advice on the use of the software program from the Licensor for a period of 12 months from the date of sale. Further assistance and support afterwards is entirely voluntary and up to the discretion of the Licensor.
5. **TECHNICAL SUPPORT** (For Systems sold by Licensor's agents or dealers). Technical Support in any form is solely the responsibilities, and at the discretion, of the dealer, or agent, who sold the software program directly to End Users.
6. **TRAINING.** Training is optional.
7. **COPYRIGHT.** The software and accompanying written material are protected by United States and International Copyright law. The Licensee shall not copy the software or the accompanying written material in whole or part.
8. **OTHER RESTRICTIONS.** The licensee shall not reverse engineer, reverse compile, modify, translate, or disassemble the licensed software, or any physical security device that comes with it.
9. If for any reason, the Licensee wants to return the software for refund within 30 days of purchase, a restocking fee of 15% of the software total purchase price will be charged. No return and No refunds shall be given after 30 days from the date of purchase. Subsequent purchase(s) of Upgrade(s) are non-refundable.
10. Licensor warrants, for a period of one (1) year from date of sale that the software will perform all the functions set out within the parameters of the said software program. If, through no fault of the Licensee, the software fails to so perform within the warranty period, Licensee must give the Licensor at least 60 days to correct each problem. If after 60 days the problem is not resolved, the Licensee may elect to return the software subject to the 15% restocking fee. When the One Year Warranty expires, NO return and NO refund request will be considered.
11. **SECURITY DEVICE.** The Loss of the security device means the Loss of the software program. The Licensee is responsible for the safe keeping of such device. For protection, the Licensee should carry sufficient insurance against such loss.
12. The Licensee shall pay for all shipping and handling fee as required for repair, exchange and other services.
13. **NO OTHER WARRANTIES.** To the maximum extent permitted by applicable law, Licensor disclaims all other warranties, either express or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the system and its accompanying software, written material and hardware.
14. **NO LIABILITY FOR CONSEQUENTIAL DAMAGE.** To the maximum extent permitted by applicable law, in no event shall Licensor be liable for any damages whatsoever arising out of the use or inability to use this system, even if Licensor has been advised of the possibility of such damage. In any event, the Licensor will not be liable for any damages from any cause in an amount exceeding the software purchase price.
15. This license is governed exclusively by the laws of Florida. The Licensee agrees to submit to the exclusive jurisdiction of Florida and not to bring suit in any other state. This is the entire agreement between Licensee and Licensor relating to this software and supersedes any prior purchase order, communications, advertising, or representations concerning the contents of the software package. No change or modifications of this agreement will be valid unless in writing and signed by the Licensor. Should any individual provision of this license be held unenforceable, such provision will be severed from the agreement, and the balance of the agreement will continue in full force and effect.

9.2 Working with Melco Condensed Format

If you are working with a file you know will be exported to a Melco DOS or Normal condensed format, or if you import a file from Melco condensed formats, the following guidelines will help you to obtain more desirable results:

- Objects ¹⁸³
- Stitch Types ¹⁸³
- Creating Fill Stitches ¹⁸³
- Satin and Line Stitches ¹⁸³
- Editing Fill Stitches ¹⁸⁴

9.2.1 Objects

In some cases, the objects created when you import a condensed format file may block your view of the stitches. Simply turn off the objects by un-checking **Display Objects** in the Design View submenu of the View Menu [11].

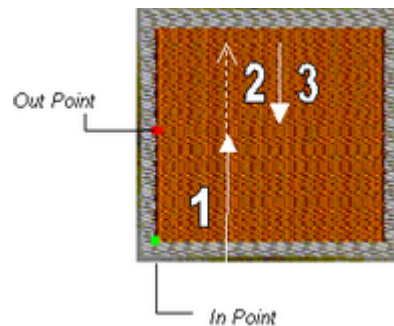
9.2.2 Stitch Types

Currently, SEDS II Achiever supports **Fill Stitches**, **Satin (Radial) Stitches**, **Single-Line Walking Stitches**, and **Manual Stitches** in converting to/from condensed formats. All other stitch types are converted to **Manual Stitches** to maintain their artistic integrity. This means that stitch types such as **Pattern Fills** can be sewn out from a condensed file with no problems; however, only minimal editing can be done to them after they are exported from SEDS II Achiever because they are **Manual Stitches**.

9.2.3 Creating Fill Stitches

In condensed files, there is no native support for multi-segment and complex **Fill Stitches**. For this reason, any **Simple Fill Stitch** that contains multiple segments, and all **Complex Fill Stitches**, are divided into several simple stitch blocks when converted to a condensed file. **Simple Fill Stitches** may have several segments if the **In** and **Out** points do not allow for the object to be filled in a single segment. Also, the condensed file format is limited to cycle settings of 4 or less.

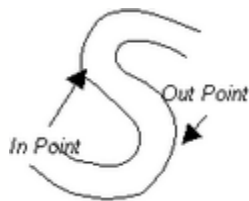
Example



The fill stitch above will be segmented into 2 pieces. When it is sewed, the "fill" fills from the In Point in the lower-left corner to the level of the Out Point (line #1). Then, it lays down a walking stitch (dotted line #2) to the top of the fill stitch. Finally, it stitches from top of the stitch block to the end point (line #3).

9.2.4 Satin and Line Stitches

The condensed format also does not allow for **Satin/Line Stitches** with **In/Out** points anywhere other than at the first and last stitch. For this reason, when a **Satin Stitch** is output to Condensed, SEDS II Achiever automatically segments that **Satin Stitch** to meet the desired locations of the **In** and **Out** points as placed by the puncher. In the example below, the **In** point of the "S" shape was placed arbitrarily on the left side in the center and the **Out** point placed in the middle of the right side. As can be seen from the sequenced diagrams, SEDS II Achiever breaks the satin up into a series of walking stitches and segmented satins.



In and Out Points as placed in the Satin Stitch.



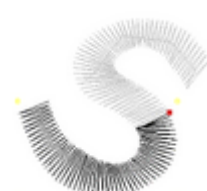
In the CNF file, travel stitches from the In points are added...



It then creates the first satin segment to sew from one end to the middle.



It then travels the far left end of the 'S'.



Finally, it sews the last satin segment back to the middle right.

9.2.5 Editing Fill Stitches

When importing a file from a condensed format, multi-segment and complex fills are converted to the **Melco Stitch** type, instead of the regular **Fill Stitch** type. **Melco Stitches** are somewhat limited because of limitations in condensed format - only the stitch length can be edited numerically. Other stitch settings can be changed; however, the process is complex. Also, when changing the shape of a **Melco Stitch** block, you must be aware that four object nodes, two at the end of each line defining the stitch area, are only reference points. While **Move Point** functions normally on all other nodes on the stitch block, moving these reference points in this manner has no effect. This is because, in condensed format, a fill stitch is defined as the area between two lines, instead of as a closed object. The reference points are the ends of these two lines. To change the area between these guidelines, you must use the **Change Guidelines** button in concert with the **Move Point** button and the internal nodes. The lines between the reference points serve two purposes - first, they define the outer limits of the stitch block, and second, the angle of the longer of these two lines determines the inclination of the stitches.

9.3 Trouble Shooting Guide

Listed below are possible situations that customers encounter during the installation, startup, or operation of SEDS II Achiever. These are basic troubleshooting guidelines only, and a more comprehensive, more frequently-updated list is available in the form of our Frequently Asked Questions list at the our website.

- Problems during Installation ¹⁸⁴
- Problems Starting the Program ¹⁸⁴
- Problems during Program Operation ¹⁸⁵

9.3.1 Problems during Installation

PROBLEM: The installation CD will not startup automatically.

Possibility 1: The CD is corrupted and you need to contact our customer support department for replacement.

Possibility 2: Your CD drive and Windows do not support auto-startup. In this case, run "e:\setup.exe" directly where "e:\\" should be replace by the drive letter of your CD drive.

PROBLEM: Authentication Error during installation

Possibility 1: You probably did not plug in your security device into the USB port. Follow the installation instruction that comes with the software to install the program.

Possibility 2: The security device is damaged. Please contact our customer support department for replacement.

9.3.2 Problems Starting the Program

PROBLEM: When starting the program, a message appears warning that the computer's display settings need to be set to at least 800x600 pixels and at least 256 colors to run the program.

Answer: SEDS II Achiever supports multiple embroidery colors in a design, as well as on-screen simulation. These features require display of at least 256 colors. Also, a resolution of 640x480 will not be sufficient to display all the icons and you may experience difficulties on accessing some of the icons. If this does not bother you, click **Yes**, else click **No**. Most VGA cards support at least 1024x768 with 256 colors. Please change your display settings in the **Display Properties** box in Windows. If your video card do not support this mode, please contact the vendor or obtain a new card that supports this resolution. Although 256-color mode is the minimum requirement, 16-bit high color is strongly recommended.

PROBLEM: When I try to start the program, the startup splash screen comes up and then goes away, and nothing happens, OR no splash screen appears, program does not start. No program window appears.

Possibility 1: Check to see that the security device is inserted properly in the USB port. If not, power down the CPU, re-insert the device, re-start the computer and re-install the software.

Possibility 2: The program files may be corrupted. Shut off the computer for a full minute. Re-boot and re-install the software and try again. If this does not work, delete the entire SEDS II Achiever program folder (separating out any stitch files you may have saved into a separate folder), re-boot the computer and re-install the software.

PROBLEM: When I try to start the program, I receive a message stating that my system has timed out and suggests that I reinstall the software.

Possibility 1: Your software has timed out due to security procedures set up when it was originally shipped (i.e. in case the shipment fails to reach your address due to theft/mishandling). Call the customer support department.

Possibility 2: You are ineligible to access the current copy of the software. For example, you may have installed a version of the software released after your designated period of free updates. If so, re-install the previously-working version of the software with your installation disks. Contact the customer support department if you have any questions.

Possibility 3: Check the Windows Device Manager and troubleshoot for any conflicts for the security device.

PROBLEM: When I try to start the program, the error message "Security device not found! System quits!" appears.

Answer: Ensure that the security device is properly inserted in a working USB port as provided in the installation instructions that came with your software.

9.3.3 Problems during Program Operation

PROBLEM: The computer crashed while I was saving a file. The next time I loaded my last saved file, the system reported the error message, "File Does Not Exist" or "Error Opening File".

Answer: We strongly recommend that customers run Scandisk on their hard drive partitions at least every week. When the system saves a file to a location that has lost clusters, it will stop saving and the file will be lost permanently. To minimize the loss, take advantage of the **Backup Save** feature described in Program Options ^[17]. Computer viruses are also another possible cause. Please obtain and install an anti-virus package to prevent this from happening.

PROBLEM: Program works for a while, but crashes unexpectedly during operation.

Possibility 1: Check your video card display driver and ensure that you have the latest version installed. There are known issues with older versions of ATI and S3 graphics card drivers, which are both excellent product lines that work well with the software with the newest versions of the driver installed.

Possibility 2: Check in the Windows Device Manager and troubleshoot for hardware conflicts.

9.4 Hotkey List

File

Ctrl-N	Open A New File
Ctrl-O	Open an Existing File
Ctrl-S	Save the Current Design
Ctrl-F4	Close the Current Design
Ctrl-F2	Acquire Image
Ctrl-B	Album Manager
Ctrl-P	Print Normal
Ctrl-H	Publish HTML File
Ctrl-Q	Exit
Alt-F4	Exit

Edit

Ctrl-Z	Undo
Ctrl-Y	Redo
Ctrl-X	Cut
Ctrl-C	Copy
Ctrl-V	Paste
Del	Delete
Ctrl-A	Select All
Ctrl-D	De-select All
Alt-C	Compact Design Colors
Alt-X	X-Mirror
Alt-Y	Y-Mirror
F7	Object Properties
F8	Lettering Properties
Alt-Enter	Design Properties

View

X	Display Selected Stitches with Background
Ctrl-W	Aerial View On/Off
Ctrl-R	Settings Preview On/Off
Alt-G	Show/Hide Grid
+	Zoom In
-	Zoom Out
Ctrl-+	Zoom to Selection
Ctrl--	Last Zoom
F10	Simulation Display
F2	Free/X-Freeze/Y-Freeze
F11	Lighten Image
F12	Darken Image
Alt-Arrow Keys	Pan

Tools

Ctrl-F	Edit Machine Code Filter
Ctrl-M	Settings Manager
Ctrl-T	Statistics
Ctrl-L	Lettering Input Wizard
T	Go to Selection

General

F1	Online User's Guide
F3	About
F4	Start Punching
Ctrl-Arrow Keys	Move Selected

Navigation

Page Up	Previous Stitch Block
Page Down	Next Stitch Block

9.5 Glossary of Embroidery Terms

9.5.1 General

Below are some terms you may hear reference to in the manual and in the industry in general.

Backing - Material sewn beneath the beneath a piece of embroidery work that actually sews underneath the garment. Can be used to stabilize stitches in the same manner as **Underlay**. Available in varying thickness and consistencies. While outside the direct scope of digitizing, understanding of the use of backing is mentioned here as it may provide the digitizer an alternate or supplemental means to stabilize stitching other than underlay.

Condensed Stitch Files - The conceptual opposite of **Expanded** stitch file types, these are stitch files that saves information for stitch blocks not as each, individual location for every stitch; instead, stitch information is saved a set of higher-level instructions that tell a computer about a stitch block's parameters, (i.e. size, shape, density, angle), leaving the *computer* to calculate each stitch based on those parameters instead of having to remember and save each stitch point. See **Expanded Stitch Files** below. Examples of condensed stitch file types are the common Melco Condensed file type (.CND), and our own native EDS stitch file type.

Expanded Stitch Files - More basic than condensed files, expanded stitch files describe a stitch file by every individual stitch point. No information is stored with such files regarding the relationship between each stitch point (i.e. Stitch Point A is in the same stitch block as Stitch Point B, and that stitch block is 4mm wide and shaped like a circle, etc); because of this, such stitch files cannot be edited or processed by simply changing the relationships between each stitch (for example, changing the stitch length, or changing the shape, resulting in a new stitch count and stitches in new locations). This being said, the final instructions sent to every embroidery machine are ultimately from an expanded version of that stitch file and that recent advances in embroidery punching systems DO allow for partial or even complete processing of expanded stitch files.

Jump Stitch - As a term, **Jump Stitch** actually refers to a command in a stitch file that causes an embroidery machine head, at that point in the file, to travel over a limited distance instead of sewing, still carrying that thread, to another location on the sewing field. **Jump stitches** are preferable to **Trims** or **Thread Cuts**, as **Trims** cause a machine to pause momentarily in a sew-out; while a thread trails the path of the jump, there are no needle insertion points, and the operator has the operation of manually trimming this thread after sew-out.

Penetration Point - The point where a stitch hits the fabric.

MDI Windows - Multiple Document Interface. A standard Windows interface type that allows an application to have more than one document open. SEDS II Achiever utilizes this Windows capability and allows users to open, digitize, edit, and cut-and-paste between multiple designs at the same time.

Underlay - A "skeleton" of initial stitches that are sewn underneath a stitch block; the purpose is to stabilize the underlying fabric of a garment to prevent it from shifting or distorting the shape of those top stitches when they sew, analogous to railroad ties underneath rails, or joists underneath floorboards. While not always necessary, almost all fabrics will distort to some degree when subject to the tiny pull/push forces applied when stitches are sewn on top. SEDS II Achiever can generate an automatic underlay when turned on by the user.

9.5.2 Object-Based Digitizing

Objects - Each stitch block or vector outline is an object. Each object has properties stored with it. In the case of a stitch block, the properties are the settings to generate the stitch points based around the shape of that object or objects. (In SEDS II Achiever, all stitch blocks must rely on an object.) For vector outlines, properties include the location of the object, and the points that define the shape. We usually refer to vector outlines as objects, and stitch blocks as stitch blocks.

Object Nodes - These are points located along an object that determine its shape. In SEDS II Achiever, there are two types of object nodes: **Curved Nodes** and **Straight/Angular Nodes**. Virtually any complex form in the real world can be represented as an object whose shape is determined entirely by a series of straight or curve points.

Stitch Block (Group) - A collection of stitch points. A stitch block can be a fill stitch, a satin stitch, a line stitch, etc. Also see **Objects**.

Object-Inheritance - Unique to SEDS II Achiever, one single vector-outline object can be shared and linked by multiple stitch blocks. When modifying the object's shape and/or size, all the stitch blocks that are related to it will be changed, too. This is called object-inheritance. For example, create an outline, then create a fill stitch. Select the outline again, and create a one-line satin border. Now change the shape of the outline, and both the fill stitch and the satin border will follow the change. This will save tremendous amounts of time in comparison with other systems, which need to re-shape and match each stitch block individually. Object-inheritance allows unlimited links to an object.

TWAIN - In DOS programs, software developers need to write device drivers for the scanners that the program supports.

Thanks to Windows, scanner manufacturers can write their own device drivers using the TWAIN interface. Therefore, software developers just need to incorporate the TWAIN interface to be able to support a vast number of scanners. Almost all new scanners available on the market now support TWAIN.

Scanner-Based Digitizing - Previous-generation embroidery design systems used digitizing tablets for input. Most new systems use scanners instead. The board-based systems required the design to be enlarged and then put on the board for input, which is inconvenient and time-consuming. Scanner-based systems allow you to use any form of artwork, e.g. business cards, letterheads, embroidery samples, etc., to be scanned in to the computer as a template. The inputs are done on-screen and the user can zoom or pan to an area easily. Editing is also more convenient with scanner-based systems. Although many digitizing systems claim to be scanner-based, none support scanners like SEDS II Achiever does.

Simulation - SEDS II Achiever offers stitch simulation views in both on-screen form and as a high-resolution printout that offers photo-realistic simulation of the stitches. In many cases, this can save the digitizer the trouble of taking a stitch file to an actual sew-out, the simulation view does a remarkable job of mimicking an actual sew.

TrueType Fonts - A common type of font that can be found in the FONT folder in your computer's Windows directory. As the shape of each letter is based on a vector outline, the characters output from that font will appear in any application with smooth outlines, true to their original shape, regardless of size or style. SEDS II Achiever takes advantage of this property by importing the vector shapes of each letter as objects, ready to build stitches on.

9.5.3 Punching

Column/Radial/Satin Stitch - All embroidery is composed of a combination of **Fill Stitches**, **Line Stitches**, and **Satin Stitches**. Satin stitches are stitch blocks that fill a shape by covering an area with thread without needle insertion points except at the edges, allowing a smooth, shiny effect. Due to the lack of needle penetrations in the center, satin stitches are generally not used to cover wide areas. The most common applications of satin stitches are as borders around a fill or to render lettering. While "Radial Stitch" usually refers to a satin stitch that is generated on curves, radial stitches are referred to in SEDS II Achiever as **Satin Stitches**.

Short Stitch - When generating a regular sharp cornered satin stitch, a lot of stitch points will hit a small area in the inside corner. This could cause thread or needle breaks. By applying short stitches, inside corner stitches will be arranged in levels, so they will not hit at the same area.

Fill Stitch - A stitch block that covers an area with thread "tacked" down with needle insertion points at regular intervals controlled one of a number of the stitch settings or parameters, such as length, offset, cycle, and angle. Usually used to fill a large area, fills result in a smoothly-textured stitch effect that can cover virtually any shape and size.

Line Stitch - A stitch block of a type that follows the path of an object, usually as a border or to render detail. A line stitch may be composed of elements one, two, or more layers of single stitches, or repeating motifs of stitches.

Stiel Stitch - A German term for a border stitch, usually a narrow satin stitch that is sewn to better-define the edge/outline of a satin or fill stitch block.

Tatami - A Japanese word for Fill Stitch. Commonly used in Asia.

Complex Fill - A single fill stitch block that covers a complex shape as a single, linked collection of segments. Examples are objects with holes, e.g. donut shapes, star shapes, etc. Most advanced systems offer this automated feature, but many low-end systems require the puncher to divide the area into many simple fills manually before stitches can be generated. Other names for this feature: **Intelligent fill**, **Intelligent Tatami**, **Complex Fill with Holes**.

Classic Column Fill - A fill stitch block whose penetration points are generated based on the outline of the object(s). Use of this kind of fill stitch results in some motion effects.

Modern Column Fill - A fill stitch block whose penetration points are generated based on the outline of the object(s).

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